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CHILE

AT THE

PAN-AMERICAN EXPOSITION

BRIEF NOTES ON CHILE

AND

GENERAL CATALOGUE

OF

CHILE EXHIBITS

Buffalo, New York

1901

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Late President of Chile.

EXCMO. SEÑOR D. GERMAN RIESCO.
President of Chile.

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TO THE

PAN-AMERICAN EXPOSITION

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COMMISSION OF CHILE AT THE PAN-AMERICAN EXPOSITION OF BUFFALO, N.Y., 1901

SEÑOR D. ENRIQUE LANZ.

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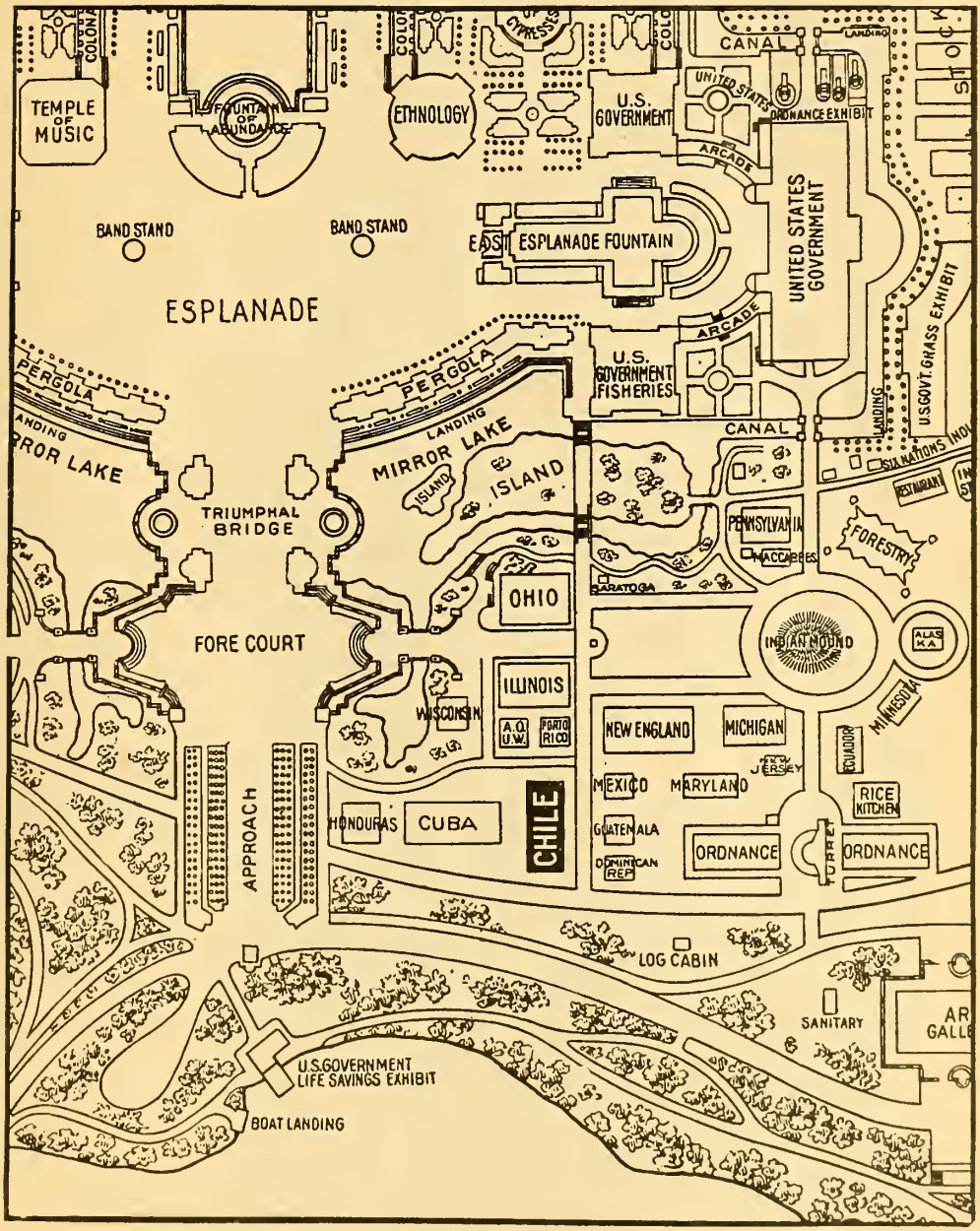
BRIEF NOTES ON CHILE.



PARTIAL PLAN OF THE EXPOSITION GROUND
Showing Location of the Chile Building.

CHILE'S GOVERNMENT BUILDING AT THE PAN-AMERICAN EXPOSITION.

BRIEF NOTES ON CHILE.

Introduction.

I.

GEOGRAPHICAL SITUATION, BOUNDARIES, EXTENT AND SURFACE—GENERAL DESCRIPTION OF THE TERRITORY—CLIMATE—PRODUCTIONS—POPULATION.

The greater part of the Republic of Chile is situated on the western coast of the continent of South America, between the Cordillera of the Andes and the Pacific Ocean, and is bounded on the North by Peru, on the East by Bolivia and the Argentine Republic, on the South and on the West by the Pacific Ocean.

The boundary of Chile on the North is the Sama River from its source in the Cordillera of the Andes to its mouth on the Pacific, lat. 17° 57′. The southern boundary is at the very extreme of the continent, the most southerly point of which is the Island of Diego Ramirez, near Tierra del Fuego.

The longitudinal extent of the territory, as far as Cape Horn, lat. 55° 59′, is 2,629 miles. The average width is 101 miles. The total area is estimated at 267,000 square miles.

The configuration of the territory presents, as notable features, the Cordillera of the Andes, which runs from North to South on the East; the coast range which runs parallel with the former, on the West, and the central valley, which extends with short interruptions between both ranges.

The Cordillera of the Andes is formed by a longitudinal chain of mountains of great height. In this is to be found the famous peak of "Aconcagua," whose height reaches 25,000 feet above the level of the sea.

The coast-range does not present a continuous line, and in general the outline of its slopes is smooth. In many places this range is connected with that of the Andes by transverse ridges.

The central valley, which from Santiago to the south presents very definite features, offers the most favorable conditions for the development of agriculture, and in it are to be found most of the cities of Chile.

Few countries offer so great a variety of climates as Chile, owing on the one hand to the limited width of the country, to her bordering on the sea, to the snow-capped ranges of mountains running throughout her extent, and on the other hand to her considerable length, having on the north a desert and on the south the Magellan region of almost continuous rains.

Bearing in mind this state of things the territory of Chile may be divided into five zones.

The first zone is to be found at the northern extremity of the country, and is characterized by its hot climate and by great scarceness of rain. There is an almost absolute lack of cultivation there; but it has, on the other hand, large beds of nitrate of soda and borates, mines, etc.

The second zone, continuing towards the south, is not so hot, and there it rains several times a year. Its principal industry is mining, but there are also some small valleys devoted to agriculture.

The third zone—that is, the one in the center of the country—has a temperate climate with periodical and fairly abundant rains. The principal industries are the cultivation of cereals, horticulture, viticulture and cattle raising; it has, besides, some very important mining centers.

The fourth zone has a cool climate, and rains are abundant there. The land is devoted principally to the exploitation of forests, the cultivation of wheat and cattle raising.

The fifth zone—the most southerly—is essentially cold and rainy, and includes a multitude of islands, channels, peninsulas and gulfs, which give it an aspect similar to that of the coast of Norway. The principal industries in operation there are fishing, raising of sheep and felling of timber.

A VIEW IN SANTIAGO.

II.

ORIGIN OF INDEPENDENT CHILE — GOVERNMENT, ADMINISTRATION AND FINANCES— PUBLIC SERVICES.

The general movement of independence which made itself felt in all the American colonies early in the Nineteenth Century found its echo in Chile on the 18th of September, 1810. On that date was formed the "First National Government," to rule the country during the captivity of the King of Spain, Don Fernando VII, who had fallen prisoner to the French.

After a stubborn war which lasted several years, the army of Chile succeeded in wresting her from Spanish power and the independence of the country was proclaimed and solemnly sworn to on the 12th of February, 1818.

After a few trials of self-government, the country was definitely organized by the adoption of the unitarian republican form of government, according to the principles of the Political Constitution which was adopted in 1833, and which is in force at this date, with only some slight modifications demanded by the progress of the country.

The Government of Chili is popular and representative, and the Republic is one and indivisible.

The sovereignty resides in the nation and is exercised through its representatives divided into three branches or Powers, thus: "Legislative," "Executive" and "Judicial."

LEGISLATIVE POWER.—The Legislative Power resides especially in the National Congress, which is composed of two Chambers.

A *Chamber of Senators*, composed of thirty-two members elected by direct accumulative vote, and by provinces, in the proportion of one senator to each three deputies. The senators are elected to exercise their functions during a term of six years, and the Senate is partly renewed every three years.

A *Chamber of Deputies*, composed of ninety-four members elected by direct accumulative vote, and by departments, in the proportion of one deputy to every 30,000 inhabitants, or fraction thereof, not falling below 15,000. This Chamber is totally renewed every three years.

All laws require approval by both Chambers and have to be sanctioned and promulgated by the President of the Republic, in order to have binding force.

Congress exercises its fiscal powers over the Administrative Power by giving or refusing its confidence to the Ministers or Secretaries of State appointed by the President of the Republic. It fixes every year the sea and land forces which may

be maintained under arms and the estimate of public expenses for the following year; authorizes, also annually, the collection of the taxes and receives the account of the investment of the public funds presented to it by the Government.

To represent Congress in the period of its recess, there exists a *Permanent Committee*, which is composed of fourteen members, chosen half by each Chamber.

THE EXECUTIVE POWER resides in the President of the Republic, who is chosen by electors appointed by the people by direct vote.

The President's term of office lasts five years, and he cannot be re-elected for the next consecutive period.

As a body auxiliary to the President of the Republic, there is the *Council of State*, which is composed of eleven members, some of whom are appointed by the President of the Republic, others by the Chambers.

This Council intervenes in some appointments, and its consent is necessary for the promulgation of the laws, for the granting of pardons, and for some other matters.

The duties which are under the charge of the Executive are divided into eight *Departments of State* or *Ministries*, as follows:

Interior.	Foreign Affairs, Church, and Colonization.
Justice.	Public Instruction.
Treasury.	War.
Navy.	Industries and Public Works.

These eight Departments are intrusted to six *Ministers* or *Secretaries of State*. The same Minister performs at one time the duties of both the Department of Justice and that of Public Instruction; and the like happens with those of War and Navy.

Each of the eight Ministries has a *Sub-Secretary of State*, who is the immediate and permanent chief of the service.

The *Ministry of the Interior* has in its charge the political government of the Republic, which is administered through the *Intendants* and the *Governors*, chiefs of the territorial divisions, who are appointed and removed by the Chief of the Executive, upon whom they are directly dependent.

On this Ministry depends whatever relates to the local administration intrusted to the *Municipalities*, which act independently of the Executive Power.

The same Ministry attends to the following services:

Police of the Cities.	General Statistics.	Posts and Telegraphs.
Public Assistance.	Hygiene and Vaccination.	

The *Ministry of Foreign Affairs, Church, and Colonization* is divided into two sections: the Diplomatic and Consular and the Church and Colonization.

The first-named section has in its charge the Legations and the Consulates of Chile in foreign countries, the relations with the Diplomatic Corps resident in the country, and the service of the demarcation of boundaries with neighboring countries.

VIEW OF A CAVALRY DRILL—"Regimiento Dragones."

The last-named section attends (1) to the relations of the Government with the Ecclesiastical service of the Republic, which is in charge of one Archbishopric, three Bishoprics and two Vicarages; and (2) to the services of immigration, the inspection and distribution of public lands, etc.

The *Ministry of Justice* has in its charge whatever relates to the Judicial Power, and, besides, the penal establishments, the service of Civil Registry, and others.

The *Ministry of Public Instruction* is divided into two sections: the section of Primary Instruction and the section of Higher, Secondary and Special Instruction.

Upon the first-named section depend the schools of primary instruction, the Normal schools, and some industrial schools.

Upon the last-named section depend the University of Chile, the Institute of Pedagogy which makes professors, the National Institute and the Lyceums for young men and girls, the Commercial Institute, the Conservatory of Music, the School of Fine Arts, the school for the Blind and Deaf-Mutes, and other institutions, as the Astronomical Observatory of Santiago, the Public Libraries, the Botanical Garden and the Museums.

The *Ministry of the Treasury* attends to what relates to the service of the custom houses and of the administration of the public revenues; to that of the treasuries, managed by the Board of Directors of the Treasury; to the service of the foreign and home debts; to that of the treasury accounts; to the tribunal of accounts, charged with fiscalizing the public expenses and with auditing the accounts which may be presented by the public functionaries and offices which administer national funds; the mint, the defence of fiscal interests, the nitrate and the guano deposits.

The *Ministry of War* has under its dependency the headquarters of the five military zones into which the country is divided; the general staff and the general headquarters of the army, and attends generally to all the services concerning the direction, organization and instruction of the army.

The Army is composed of 6 regiments of artillery, 10 of infantry, 8 of cavalry and 1 of military engineers. Compulsory service exists, and by it 15,000 men will be instructed annually. The National Guard has 500,000 citizens registered.

For the command of the army there are: 10 Generals, 18 Colonels, 135 Commanders and 700 Officers.

The Academy of War, the Military School and the School for Sergeants and Corporals, are the principal establishments for military instruction existing in Chile.

The *Ministry of the Navy* has in its charge, through the intermedium of the general direction of the navy, which is dependent upon it, whatever refers to the naval service of the Republic; the preservation and improvement of materials; the management and instruction of the personnel; the military administration of the ports; the defence and lighting of the coasts, and hydrographic studies.

At present our fleet is composed of 40 vessels, among which are: 9 iron clads and protected cruiser, 5 gunboats and torpedo cruiser, 1 training-ship, 4 destroyers and 13 torpedo boats, not including transports and other auxiliary vessels.

The personnel is composed of 1 Vice-Admiral, 5 Rear Admirals, 18 Captains, 28 Commanders, 38 Lieut.-Commanders, 60 Senior Lieutenants, 70 Junior Lieutenants, 50 Ensigns, 75 Midshipmen, 120 Staff Officers and 450 Warrants, Petty Officers and Men.

Naval instruction is given principally in an Academy for that purpose which exists in Valparaiso, having as headquarters a first-class building; it is also given in the training ship "General Baquedano," on board of which the midshipmen are sent to other parts of the world to perfect their knowledge, as well as in special schools for training, existing in Valparaiso and Talcahuano.

Upon the *Ministry of Industries and Public Works* depend the general management of public works, which has in its charge the management, construction and maintenance of the public works and the planning of new works; the general management of the railways, which operates the State lines; what relates to the granting of patents and industrial institutions, as schools of Mines, Agriculture, Arts and Trades, professional Schools for Girls, etc.

THE JUDICIAL POWER is exercised by means of permanent tribunals, some of them formed of one member, and others by several members. These tribunals are independent of all other authority and can only be deposed for causes legally determined in the exercise of their functions. These tribunals are the following named:

The Supreme Court of Justice residing in Santiago and composed of seven members. To its authority and vigilance are subject all the tribunals of the Republic.

The Court of Appeals, composed of members whose number varies from four to fifteen. Each one exercises his authority in one of the six jurisdictional districts into which the country is divided for this purpose; and they have their seats in Tacna, Serena, Valparaiso, Santiago, Talca and Concepción.

One or more *Justices of the Peace* in each Department of the Republic.

All these magistrates are appointed by the Executive Power, being chosen from lists specially made by the courts.

The decisions of the Justices of the Peace are, in determined cases, revised by the respective Court of Appeals; and those of the latter are revised in their turn, in certain cases, by the Supreme Court.

Minor justice is administered by *Subdelegation and District Judges*, gratuitous functionaries, appointed by the Intendants.

Juries exist only for suits for abuses of freedom of the press.

For the purposes of the political government Chile is divided into twenty-three Provinces and one Territory. The Provinces are divided into Departments, the Departments into Subdelegations, and the latter into Districts.

For the purposes of "local administration," the territory of the Republic is divided into Municipal Circumscriptions or Communes, one for each 20,000 inhabitants.

CHILE NAVY—Battle-ship 'O'Higgins."

The following is a list of the Provinces of Chile, mentioned in order from the North to the South: Tacna, Tarapacá, Antofagasta, Atacama, Coquimbo, Aconcagua, Valparaiso, Santiago, O'Higgins, Colchagua, Curicó, Talca, Linares, Maule, Ñuble, Concepción, Bio-bio, Arauco, Malleco, Cautin, Valdivia, Llanquihue, Chiloé and the Territory of Magallanes.

PUBLIC TREASURY.—On the first of January, 1900, the *Foreign Debt* of Chile amounted to $234,208,100 (£17,570,000); the *Home Debt* to $75,981,000 (£5,700,000); the *Total Debt*, then, reached $310,189,100 (£23,270,000), or say £7, 2s. 5d. for each inhabitant.

The *National Assets* in money, bonds, railways, telegraphs, buildings, lands, nitrate deposits, etc., may be estimated at $678,000,000, without taking into account many national properties not yet inventoried. Deducting from these assets the amount of the debt and some other obligations of the State, there remains in favor of the National Treasury a balance of $354,000,000.

The *Fiscal Revenue* amounted in the year 1900 to $145,000,000; the *Expenses* to $109,000,000, leaving a surplus of $36,000,000 in cash.

The Receipts estimated for the present year are $111,432,000. Adding to these receipts the surplus from last year gives a total of $147,432,000. The estimated expenses will be $67,479,000 in the various public services; $30,932,000 in the service of the home and foreign debts and $17,457,000 in public works, or, say a total of $115,868,000.

The usually flourishing state of her finances has permitted Chile to invest considerable sums in public works of utility, as railways, graving-docks, roads, bridges, buildings, canalization of rivers, supplying of water to the cities, etc. In the space of twelve years, from 1888 to 1900, the sum of $152,000,000 has been invested in these branches.

PUBLIC SERVICES.—Chile has always taken special pains in keeping her public services up to the standards of the most advanced countries. Among them, Public Education forms one of the most important. It depends upon the Ministry of that branch, through the intermedium of the Council of Public Instruction, which has in its charge the direction and higher supervision of the studies. In behalf of the freedom of instruction guaranteed by the constitution of the State, there are also numerous private establishments devoted to the same purpose.

The University of Chile is the institute of higher instruction, and includes the sciences of Law, Engineering, Medicine, the Fine Arts and Theology. The courses of professional instruction followed there, prepare Lawyers, Engineers, Physicians, Pharmacists and Dentists, and, taken together, they have an attendance of 1,300 pupils.

The other public educational institutions, besides the University, are: The National Institute, an important establishment of secondary instruction, with 1,200 pupils; the Institute of Pedagogy which forms teachers; thirty Lyceums of secondary instruction for men, with a total of 6,200 pupils; twelve Lyceums for girls, with 1,300 pupils; 1,500 schools of primary instruction, with 116,000 pupils of both sexes; six Normal Schools which make teachers for primary instruction; and numerous establishments of special instruction, such as: a Conservatory of Music;

a Commercial Institute; Schools of Fine Arts, Agriculture, Mining, Arts and Trades, for Blind and Deaf-Mutes, Professional Schools for girls, Industrial Schools, etc.

The instruction furnished by the State is always free.

Among the private establishments of instruction which deserve mention are: the Roman Catholic University, which has courses of Engineering and of Law; numerous establishments of Secondary Instruction, Seminaries, Lyceums for young men and for girls, etc.; Schools of industrial instruction and Asylums for orphan girls and boys, and 450 Primary Schools with 27,000 pupils of both sexes.

The establishments of public instruction in Chile have always enjoyed a solid reputation, not only in but also out of the country; numerous students from the different countries of Central and South America, are educated in the University, and in the Pedagogic, Military, Naval and other Schools.

There are in the country several Museums of Natural History and of Fine Arts, a Botanical Garden, an Astronomical Observatory, several Meteorological Observatories, and forty-one Public Libraries, with 240,000 volumes.

Railways in a new country, as in Chile, is one of the primordial needs, and, in consequence, it has been raised to the rank of a public service; at present these are held partly by private enterprises and partly by the State.

Owing to the configuration of the territory, Chile needs a great longitudinal line running through her from North to South, with transverse branches connecting it with the coast.

This work is accomplished in the greater part of the extent comprised between Pisagua (lat. 19° 34′ 9″) and Valdivia (lat. 39° 49′ 18″) and the Government is very anxious to complete the lacking sections, for which purpose large sums are annually provided by the Budget.

The State railways in present operation have an extent of 1,420 miles and their value is $100,000,000.

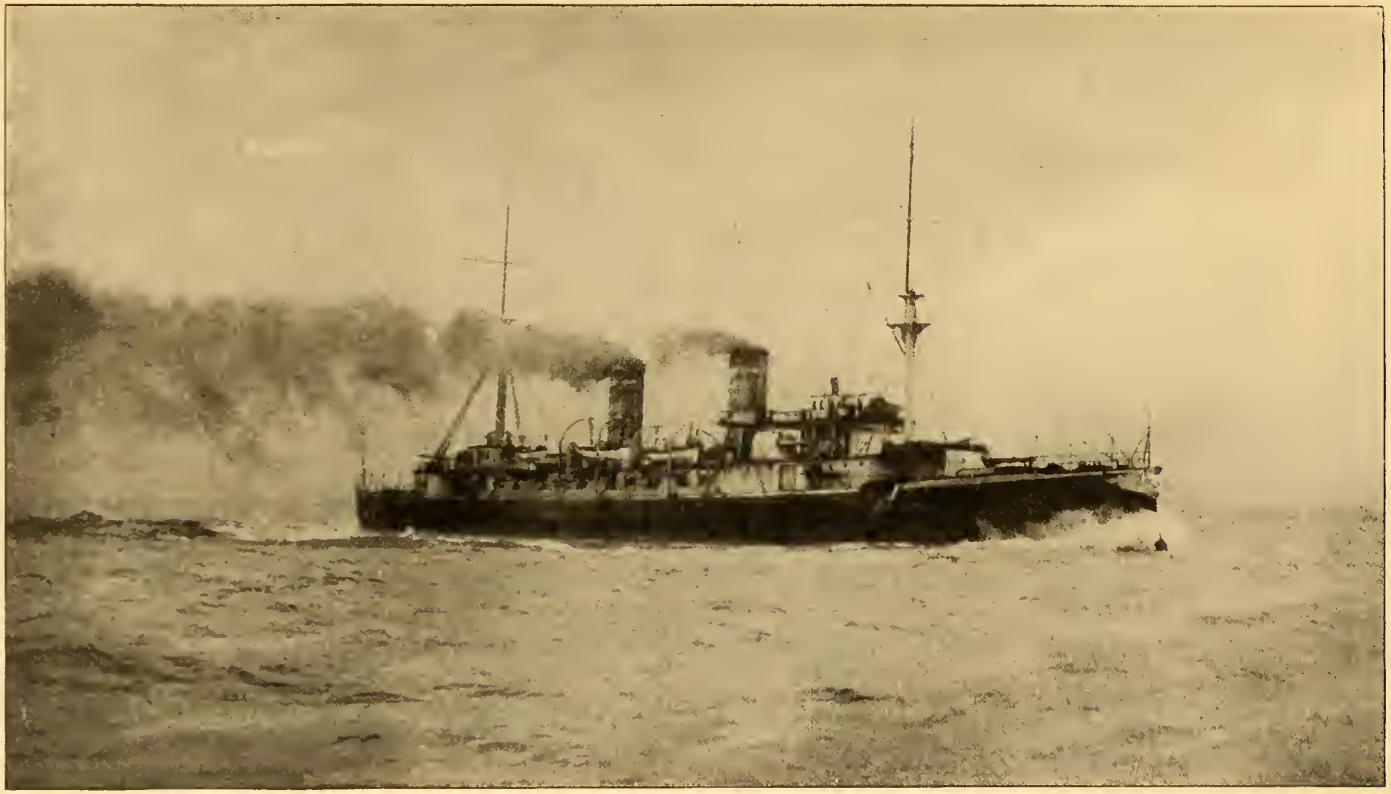
The private railways have an extent of 1,430 miles, which, together with the State railways, make a total of 2,850 miles. If to this figure be added 200 miles which are in advanced construction, it may be asserted that in a very short time the Republic will have more than 3,000 miles of railway. This figure gives a proportion of 0.90 lineal miles of railway to each 100 square miles of total territory. Leaving out the deserts in the North and the vast archipelagoes in the South, it may be said that the inhabited part of the country has more than one mile of railway to each 50 square miles of area.

The State railways transported nearly 6,500,000 passengers and 2,500,000 tons of freight in 1899. The net product is small, because rates are kept very low, for the purpose of promoting the public wealth by facilitating intercourse and the interchange of products.

There are, besides, about 30,000 miles of wagon roads in the country. Navigation on rivers and lakes is carried to an extent of about 1,000 miles.

All the cities of any importance have street railways.

The Post-office of Chile forms part of the Universal Postal Union, not only as regards ordinary and registered correspondence, but also as regards money-orders, packages and declared values.



CHILE NAVY—Armored Cruiser "Esmeralda."

The management and supervision of this branch of administration is intrusted to a Director General with residence in Santiago.

The number of post-offices is 740; they had in 1899 a total delivery of 40,000,-000 pieces, including those sent to and received from foreign countries.

The department of postal money-orders handled, in the same year, a total amount of $8,000,000.

The Postal service, like that of the railways, has very low rates, calculated to cover expenses.

Newspapers, reviews, and other periodical publications circulated free, as aiming at instructing of the people.

The telegraphic service, as in the case of railways, is performed partly by the State and partly by private enterprises. The State lines run over an extent of 11,200 miles, and the private lines 2,800 miles, which give a total of 14,000 miles of telegraph lines for internal communications.

Two lines of submarine cables and two land lines which cross the range of the Andes by underground cables, put the country in direct communication with the rest of the world.

Most of the cities and industrial centers of any importance have the telephone service established for their home relations with neighboring localities and even distant points of several provinces.

This service is in the hands of private enterprises which have invested in it a sum approximating to $6,000,000 and they operate 15,000 miles of wires.

The Fire service is performed in Chile by volunteer brigades which are organized and managed by their members. The authorities do no more than help them with moderate subventions of money.

Nearly all the cities of the country rely upon those bodies which, taken together, form nearly 100 companies. Their personnel consists of 7,000 members, who work gratuitously, and even contribute to the support of the institution with private donations.

The Department of Hygiene is managed by a Superior Council residing in Santiago, and by 96 Departmental Councils distributed throughout the Republic. There is in Santiago an Institute of Hygiene furnished with laboratories for all class of work, from chemical analysis to the preparation of specific serums.

The Public Disinfectory of Santiago depends upon the Superior Council of Hygiene.

The Department of Vaccination is in charge of a Central Board, which also resides in the capital, with a laboratory for work, and 96 Departmental Boards. Thanks to this department the epidemic of small-pox, which formerly decimated the population, is materially overcome. In 1900 no case of this disease was declared in the whole country.

Public Assistance is in charge of 97 Boards and is administered by means of Hospitals, Houses of Charity and Asylums scattered throughout the Republic. Their total number is 122.

III.

INDUSTRY AND COMMERCE.

Among the countries of South America, Chile has always distinguished herself by her progressive spirit, hastening to introduce each one of the innovations of science as soon as its advantages were proved.

Thus, for example, in 1844 steam navigation from Valparaiso to Panamá was established. In 1849 an astronomical observatory was founded in Santiago. In 1850 the steam railway between Copiapó and Caldera was inaugurated, and the supply of drinking water by means of pipes was established in Valparaiso.

In 1855 the electric telegraph between Santiago and Valparaiso and gaslight in the last-named city were established. In 1853 the postal service at low rates through a system of stamps was introduced. In 1860 street cars drawn by horses were started in Valparaiso. In 1868 was begun the placing of steel rails on the State railroads. In 1880 electric lighting by the Edison system was tried with success in Santiago. In 1884 telephone service was established in that city. And in 1890 the wireless telegraph was established between the island of Chiloé and the main land, in the South of Chile.

Recently electricity has replaced horses in working sixty miles of tramways in Santiago.

This same progressive spirit, which is noticed in the adoption of the great improvements of civilization, has been applied also to the development of industries and of commerce, the results depending, naturally, upon the economical conditions in which the country finds herself placed, as regards her geographical situation, natural production, and the elements of her population.

The principal industries of Chile are Agriculture and Mining. It is estimated that there are more than 6,177,000 acres under cultivation. The fields devoted to cattle-raising occupy a very small extent of the lands which might be usefully devoted to this very industry.

Agricultural production is represented principally by the cereals and the products of the vine. The production of wheat is estimated at 22,700,000 bushels; that of barley at 4,250,000 bushels; that of beans at the same quantity, and that of potatoes at 11,350,000 bushels.

The cultivation of the vine has, in the last twenty years, taken on a very considerable development, and is to-day one of the most advanced agricultural industries of the country.

As the extent of the arable lands in Chile is estimated at 25,000,000 acres and only a fourth part is at present utilized, there still remains a very exten-

sive field for the development of agricultural production and for the investment of capital.

Mining constitutes a branch of wealth of great importance to the country. The principal productions in the year 1900 is shown with their respective value in the following table:

Products.	Weight.	Value.
Nitrate of Soda	1,465,935 tons,	$109,945,156
Copper	28,040 tons,	28,040,000
Coal	896,000 tons,	10,752,000
Silver	163,228 pounds,	4,686,700
Iodine	318 tons,	4,043,172
Gold	4,576 pounds,	3,779,110
Guano	34,435 tons,	1,377,400
Borate of Lime	13,176 tons,	1,317,676
Manganese Ore	14,715 tons,	431,406
		$164,372,620

The coal of Chile is found in the tertiary formation, and may be called lignite of first quality, or, rather, intermediate between lignite and bituminous coal. The seams, some of which are 5½ feet in thickness, slope towards the west, and being the workings near the coast, much extension of them are at present under the sea.

Coal is found in Chile at various points in the north and center; but it is chiefly in the south, near the bays of Arauco and Talcahuano, that the workings have been developed. There are eight companies there, the most important being the "Compañia Explotadora de Lota y Coronel," which mines annually yield nearly 900,000 tons. These companies employ approximately about 8,000 laborers in the different works.

Examinations made by the Government, in the interior of the country, have proved the existence of good workable veins in the neighborhood of Angol, Temuco and Cholchol.

In the southern part, near Punta Areanas, an establishment is being put up to work considerable seams of coal, of about the same quality as that of Lota and Curanilahue.

The production of nitrate of soda, or saltpetre of Chile, constitutes the most considerable branch of the mining wealth of the country. The exploitation of this substance is limited to the provinces of Tarapacá, Antofagasta and Atacama.

The production of copper, which is next in importance to that of the nitrate of soda, is due principally to the mines which are to be found in the provinces of Atacama and Coquimbo.

Copper is exported from Chile in bars, regulus, high grade ores, and auriferous or argentiferous regulus, or of the two kinds together.

The most important metallurgic centers are situated in Iquique, Cobija, Antofagasta, Taltal, Chañaral, Copiapó, Higuerilla, Guayacan, Aconcagua, Santiago and Lota.

The establishment in Antofagasta is deserving of mention as one of the greatest importance for its size and the large capital invested in it.

The manufacturing industries in Chile have not yet reached the development they are destined to have, given the favorable conditions existing there.

The principal element upon which the country relies for the establishment of all kinds of industries are the beds of coal, as yet but little worked, and the motive power which may be obtained from the numerous rivers which are found in the mountain ranges.

Furthermore, a great variety of mineral substances applicable to industries are to be found in Chile, and raw animal and vegetable materials are produced in abundance.

Among the principal manufacturing industries in actual operation the following may be mentioned :

Milling, represented by more than 500 flour mills, nearly all of which use rollers supplied with the most modern improvements, deserving mention principally, those existing in the provinces of Santiago, Valparaiso, O'Higgins, Talca, Linares, Ñuble, Concepción, Malleco, Cautin and Valdivia.

Tanning has made great progress, having noteworthy establishments in Valdivia and in Santiago. Equal progress is to be noted in the industry of manufacturing shoes and saddlery.

Mechanical industries have large factories in Valparaiso, Santiago and Copiapó.

The brewing of beer, which is spread throughout the country, and has reached a high degree of advancement, the large breweries existing in Santiago, Valdivia and Valparaiso deserving mention.

The industry of the distillation of alcohol, which is represented by very important factories in Talca, Bio-bio, Valdivia, Llanquihue.

Wood-working, cabinet industries and cooperage are established in the principal cities.

The manufacture of building materials, bricks, water pipes, etc., is also well advanced.

There are two large manufactories of woolen cloth and one of knitting works.

Clothes are made in large establishments in Valparaiso and in Santiago.

There are also four manufactories of common paper (wrapping).

The printing and lithographing establishments of Valparaiso and Santiago are equal to the best of their kind. The processes of stereotyping and photo-engraving, as well as the use of linotype machines, are perfectly understood.

The amount of the international commerce of Chile during the year 1899 was $269,366,491 Chilean money.

Of this sum $ 106,260,358 correspond to imports, and $ 163,106,133 to exports.

The coast trade of the different ports reached the sum of $107,079,500 in exports.

The commerce of the transportation of foreign merchandise, which is carried on principally by way of Antofagasta, a port for the commerce of Bolivia, reached in the same year the sum of $9,642,740.

The commercial importance of the eleven principal ports of Chile in 1899 is shown in the following table:

Ports.	Exports.	Imports.
Iquique	$71,366,043	$10,704,569
Valparaiso	17,397,890	66,968,613
Pisagua	14,654.644	1,323,698
Tocopilla	11,767,002	1,586,484
Coronel	10,732,239	1,837,031
Coquimbo	8,830,265	2,821,358
Antofagasta	8,626,203	3,530,678
Taltal	7,302,906	1,150,278
Talcahuano	6,047,286	13,305,219
Caldera	2,986,312	1,259,779
Valdivia	2,472,485	1,305,619

The five principal nations which have commerce with Chile, and the corresponding figures for 1899, are given in the following table:

Countries.	Exports.	Imports.
Great Britain	$110,528,378	$44,338,050
Germany	20,921,999	29,748,898
France	9,334,281	5,525,162
United States	7,349,858	8,197,569
Peru	4,248,312	5,185,194

As regards the Chilean products, which constitute the commerce of exportation, 84⅓ per cent. belong to mining; 10½ per cent. to agriculture; 2½ per cent. to manufactures, and the rest to various products and to coin.

The imports of the year 1899 are classified in the following manner:

Food Products	$17,696,659
Manufactures	14,032,630
Machinery	12,695,066
Raw Material	21,731,717
Woolen Goods	29,058,119
Beverages and Cigars	1,268,099
Sundry Articles	9,778,068
	106,260,358

The maritime movement of the ports of Chile in 1899 was 7,154 ships, having a capacity of 9,738,764 tons.

Navigation by sail and by steam is made in the ports of Chile and with foreign countries by numerous enterprises in the form of permanent lines.

The coast trade is freely carried on by foreign vessels, and this is one of the reasons why the national mercantile marine has not been able to develop more. Some of the aforementioned enterprises are national, and have a fleet of 162 ships, including 41 steamers. Most of these steamers belong to the "Compañia Sud Americana de Vapores," which runs its lines to San Francisco, Cal.

There are twenty-two commercial banks in the republic. Three of them are foreign, and the remaining nineteen are national, with a capital of more than $42,000,000.

There are besides three mortgage banks, which have $160,000,000 in mortgage certificates issued.

ARICA

DESCRIPTION OF PROVINCES.

PROVINCE OF TACNA.

This province, which is situated at the northern extremity of the Republic, has an area of 8,687 square miles, a population of nearly 30,000 inhabitants, and is divided into two departments, Tacna and Arica.

The city of Tacna, with a population of 10,000 inhabitants, is the capital. The receipts of its municipality in 1899 were $120,000.

It has a Court of Appeals and two Courts of Justice, a lyceum of instruction for men, and several public schools. Among the principal commercial establishments the Bank of Tacna, with a paid capital of $300,000, deserves mention.

In 1857 a railway, 42 miles in extent, was built to connect it with the seaport of Arica. The Government proposes to continue this line as far as the Republic of Bolivia, in order to make easy for that country the transport of her products to the coast.

Arica, with a population of 3,000 inhabitants, is the only seaport of the province, but there are also small bays of minor importance suitable for commerce. The said port is on a harbor having good anchorage for vessels. In 1899 the municipal receipts were $90,000.

This arid province has two rivers, the Sama, which marks the boundary between Chile and Perú, and the Tacna, which runs past the capital, both irrigating only a small part of their respective valleys.

The Cordillera of the Andes in that province has several passes which are open for traffic throughout the year.

The principal mineral products are sulphur, copper, lead and common salt. In the valleys near the city of Tacna, vegetables, grapes, olives, fruits, coffee, cocoa, sugar-cane, cotton, etc., are also produced.

There are three telegraph lines in the province, one private, which belongs to the railway and is extended to the city of La Paz, in Bolivia; the State telegraph, which runs throughout the province; and the Galveston cable, which has an office in Arica.

The property of the province has been appraised, for the purpose of payment of the taxes, in the following manner: urban property at $7,000,000 and rural property at $1,000,000.

According to the treaty of peace which the Government of Chile made with Perú, on the 20th of October, 1883, a plebiscite must decide to which country the final control of this province will belong.

Vista Jeneral de Pisagua

CALETA BUENA

PROVINCE OF TARAPACA.

The extent of this province is 19,305 square miles, and its population reaches 115,000 inhabitants. It is divided into two departments, Pisagua and Tarapacá.

The port of Iquique, with a population of 33,852 inhabitants, is the capital of the province. This city is of great commercial importance, and valuable works for the improvement of the port have been constructed there. It has a supply of drinking water which is brought from Pica, a point situated 100 miles from the city. It is also well drained. There are several volunteer companies of firemen for cases of fire.

The municipal receipts amount to $700,000 yearly. There are telephones, telegraphs and railways for communication with all the principal towns in the province.

The principal railway is the one connecting the port of Iquique with that of Pisagua on the north, and with Lagunas on the south, running a distance of 299 miles, and having a capital of $8,200,000.

There is also a street railway extending 11 miles.

The port of Pisagua is the second city in the province, and has a population of 4,000 inhabitants. The municipal receipts reach $200,000.

The small ports of Caleta Buena and Junin, dependencies of the Custom House of Iquique, keep up an active trade in the exportation of nitrate of soda, and are in communication with the interior by means of railways.

The province of Taracapá is watered by two important rivers, which are called Camarones and Loa. The waters fertilize only some ravines and valleys, in which grows rich vegetation. In the midst of the desert are the forests of Tirana, Cumiñilla and Quillagua.

In some parts of the Pampas, and under the salt crust of the surface, fresh water suitable for drinking is found.

The temperature of the province is hot during the day but cool at night. The air is generally dry, especially on the Pampas. It rains on rare occasions, but dense mists are often seen on the coast.

The province is rich in mines, but only those in the neighborhood of the railways are worked. Ores of all kinds, borates, sulphates of iron and aluminum, and many other mineral products abound. The principal mining seats are those of Challacollo, Huantajaya, Santa Rosa and Copaquiri.

The mines give employment to three smelting establishments.

But the great riches of this province consist in the abundant deposits of nitrate of soda (saltpetre of Chile) existing there. In the year 1899, 1,114,278 tons, with a value of $77,999,486, were exported from this province.

In the working of the nitrate of soda there are fifty-eight establishments, which are called " oficinas," and give employment to 20,000 laborers.

The value of the property, estimated for the purpose of paying the municipal taxes, and with the exclusion of the State property, is $310,000,000, distributed as follows: urban property, $60,000,000; " oficinas " and agricultural property, $250,000,000.

The province of Tarapacá offers a wide field for the investment of capital.

BAHIA de IQUIQUE

PLAZA de IQUIQUE

IQUIQUE

Oficina Salitrera (La Democracia)

TOCOPILLA

PROVINCE OF ANTOFAGASTA.

This province has an area of 47,878 square miles and a population of 65,000 inhabitants. It is divided into three departments, Tocopilla, Antofagasta and Taltal.

The city of Antofagasta, a seaport at the foot of a high table-land, with a population of 20,000 inhabitants, is the capital. Drinking water is supplied by a tributary of the river Loa, from an altitude of 10,000 feet, by means of a line of pipes 250 miles long. In this city there is a large "oficina," or establishment for working nitrate of soda and its by-products, iodine, sulphate of soda and salt; two metallurgical establishments for working silver and copper ores, the most important of which, the "Playa Blanca," cost $6,000,000, and is at present leased to an American company.

The municipality depends on an annual income of $200,000 for local services.

The other principal ports of the province are Tocopilla and Taltal. The former has a population of 9,000 inhabitants, and possesses machinery for the distillation of sea-water, which is used for drinking, but the chief consumption is that from the river Loa, which is carried to the city by pipes extending 50 miles. The port of Taltal has 7,000 inhabitants, and possesses a similar system of water supply to that of Tocopilla. The celebrated mineral district of "El Guanaco," which has yielded large quantities of gold, is to be found there.

The province of Antofagasta is like that of Tarapacá in climate and productions. Vegetation unfolds along the river Loa, especially near Calama, and affords good pasture.

All the importance of the province is owing to its beds of nitrate of soda and borates, and to its gold, silver and copper mines.

The nitrate "oficinas" are situated at a short distance from the coast, and the most important ones are those of Toco, connected by railway with the port of Tocopilla, and those of Salar and Carmen Alto, connected by railway with Antofagasta.

The nitrate of soda exported in 1899 by the different ports of the province was 266,439 tons, having a value of $18,650,796.

The principal bed of borax is that of "Ascotan," which is the most important deposit in the country.

Among the mineral centers worthy of mention are the silver mines of "Caracoles," which were formerly of great importance, and which may yet recover, as they still contain very rich ores.

There are also very important copper mines, as those of Chuquicamata, which are now beginning to be worked on a great scale. Other mining seats of gold, silver and copper, also very important, are those of the Sierra Gorda, Conchi and San Jose del Abra.

There are three railway lines in this province. One runs from Antofagasta to Oruro, in Bolivia, and is 575 miles long, 275 of which are in Chile territory. It is notable as well for its extent as for the altitude to which it ascends, 13,500 feet above the level of the sea. Its gauge is two feet six inches. On this line, over the river Loa, is to be found one of the highest viaducts up to this time built, which is 336 feet high.

This railway was built by Chile capitalists and afterwards sold to an English company. Originally its object was to connect Antofagasta with the nitrate works near the coast; afterwards it was extended to the mines of Huanchaca, for the transportation of its poorer ores, and was finally made international by extension to Oruro, one of the capitals of Bolivia. At present a branch of this line is being built for the exploitation of the nitrate grounds of Aguas Blancas.

The other railways are: one from Tocopilla to Toco, which runs over 55 miles and reaches to a height of 1,100 feet, and another from Taltal to Cachinal, running 72 miles and rising 9,000 feet. This was also built at first with the object of giving an outlet to the nitrate "oficinas" of the interior, and was then extended to the mines of Cachinal.

The whole province is served by offices of the State telegraph and by those belonging to the three railways which exist in the province.

There are, besides, in the ports of Antofagasta, Tocopilla and Taltal offices of the Galveston Submarine Cable.

The value of the property in the province, without taking into account that belonging to the Government, as appraised for the payment of the taxes is: urban $4,000,000, and not urban $25,000,000. This province, like that of Tarapacá, is destined to become very important through the investment of capital for the development of its wealth.

ANTOFAGASTA
Plaza Colon y Calle Prat

PROVINCE OF ATACAMA.

The area of this province is 28,418 square miles, its population is 70,000 inhabitants, and it is divided into four departments, Chañaral, Copiapó, Freirina and Vallenar.

The city of Copiapó, with 12,000 inhabitants, is the capital of the province. Among its institutions of instruction, a special School of Mines, in which is found the most important mineralogical collection in the country, deserves mention. It is supplied with water by means of pipes, with a tramway, with a telegraph and submarine cable, telephones and railway communication with the port of Caldera and the interior of the department.

The other principal cities are: Vallenar with 9,000 inhabitants and Freirina with 5,000. Besides the port of Caldera, which is the principal one, there are in this province those of Chañaral, Huasco and Carrizal. In this province it rains very seldom in the course of the year; the soil is very arid, excepting in the valleys of Copiapó and Huasco, where it is very fertile. The former is devoted almost in the greater part to the cultivation of fruit trees and vegetables; in the latter, fruits also are cultivated, and especially grapes, used in making raisins and rich wines. In this valley of Huasco there is also a considerable extent of land devoted to the cultivation of alfalfa for fattening animals. In both valleys wheat and barley are raised.

As a natural product of the fields, algarrobilla, a shell and seed very rich in tannin, is gathered and exported in great quantities.

The province of Atacama is eminently mineral and its wealth, developed very long ago, keeps its importance up to this time. The ores which have been chiefly and are still worked, are gold, silver, copper, lead, iron and manganese; bismuth, cobalt and nickel are also found to some extent.

There are, besides, rich beds of nitrate of soda, borate, sulphur, lime, salt, etc.

The department of Copiapó offers good conditions for continuing as a center for establishments to work ores, because of its cheap living on account of the agriculture carried on there, and for the abundance of water for drinking purposes and for the production of motive power.

This province alone has maintained more than twenty establishments for the working of gold, silver and copper ores.

The copper of the province of Atacama is in great part auriferous. In the valley of Huasco there are inexhaustible beds of marble, suitable for the construction of buildings. They are easily and conveniently worked and have easy connection with the coast.

The Copiapó railway was the first one built in the Southern Hemisphere; it was commenced in 1848, and was delivered to the service of the public in July, 1851; it belongs to a private company. The first locomotive run on this line is on exhibition to the public in the Pan-American Exposition of Buffalo.

Chañaral has 75 miles of railways in operation and 31 in construction, besides 31 miles more in Huasco, all belonging to the State. In Carrizal there are 110 miles belonging to a limited company.

The valuation of the properties in the province, made for the purposes of the payment of the municipal taxes and without taking into account the fiscal property, is as follows: urban property, $8,000,000; country property, $8,000,000. The incomes of the municipalities of the departments amount to: Copiapó, $1,000,000; Vallenar, $40,000; Freirina, $30,000; Chañaral, $25,000.

"COPIAPO" LOCOMOTIVE.

The first exported by the United States and the first to run on the Southern Hemisphere, Copiapo Railroad, 1850.

LA SERENA

COQUIMBO

PROVINCE OF COQUIMBO.

The area of this province is 12,896 square miles, and it has a population of 175,000 inhabitants. It is divided into the departments of Serena, Elqui, Coquimbo, Ovalle, Combarbalá and Illapel.

La Serena, with 16,500 inhabitants, and connected with Coquimbo, the principal seaport in the province, by a railway which runs the distance in half an hour, is the capital. La Serena has a bank with a capital of $500,000. Coquimbo has a population of 10,000 inhabitants. The receipts of the municipality in 1899 amounted to $70,000.

There are in the province other towns and minor ports of some importance. Among the former, Ovalle, with 5,500 inhabitants; Elqui, with 2,500; Combarbalá and Illapel with 1,200 and 3,200 inhabitants, respectively, deserve mention.

The interior is full of small towns, which constitute agricultural and manufacturing centers.

The rivers Coquimbo, Limari, Choapa and many tributaries of these, which, in general, carry but little water, irrigate only a small extent of land which abounds in natural pasturage.

The agricultural products of the province exceed its needs, so that the excess is exported to the regions of the north. The vine is sufficiently cultivated principally in spots near the mountain range, and rich brandies and wines are produced.

The mineral products are equally distributed throughout the province, there being great quantities of gold, silver, copper and iron. There is a bed of quicksilver and another of lapis-lazuli which have been worked. Lime and sulphate of iron abound there.

In the province of Coquimbo there are in actual operation two lines of railway belonging to the State and one belonging to a private company.

The State railways run over 160 miles, and there are 60 more in process of construction. One of the lines in operation runs from Coquimbo 50 miles to the interior. The State intends to acquire this property.

There are telegraph and telephone services throughout the province, and offices of the submarine cable are at La Serena and Coquimbo. There are four large copper-smelting establishments and several others for gold and silver ore.

The valuation of the property is as follows: urban property, $16,500,000, and rural property, $26,500,000.

PROVINCE OF ACONCAGUA.

The area of this province is 6,448 square miles. It has a population of 135,000 inhabitants and is divided into the departments of San Felipe, Putaendo, Los Andes, Ligua and Petorca.

The city of San Felipe, with 12,000 inhabitants, is the capital, and Los Vilos the principal seaport. The other important cities are: Los Andes with 6,000 inhabitants, Putaendo with 2,500, Ligua with 2,500, and Petorca with 1,000.

The population of the province is well scattered throughout the country among the mineral and manufacturing establishments.

There is a good road in the pass of Uspallata, over the Cordillera, where the greater part of the traffic with Argentine passes. It is here that a railway is being built which will be a daring piece of engineering, crossing the boundary line between Chile and Argentine at an altitude of nearly 11,000 feet.

Two railways belonging to the State are in operation in the province. One connects Cabildo, in the valley of La Ligua, with the railways of the central provinces of the country, and the other, which is in construction, starts from the port of Los Vilos and runs now into the valley of Choapa, a distance of forty miles.

The telegraph service is conducted by the State lines and by two private companies giving also international service. These last ones use underground cables through the pass in the Cordillera.

The cities of San Felipe, Los Andes and Llaillai are connected by telephone with Valparaiso and with Santiago.

The principal rivers in the province are the Choapa, the Ligua and the Aconcagua, with their numerous tributaries.

The soil is very fertile and the water used for irrigation purposes is rich in fertilizing substances, which greatly enhance the quantity and quality of the crops. That portion of the valley watered by the river Aconcagua is especially adapted for the raising of alfalfa and cereals and for the establishment of orchards and vineyards. The grape is devoted almost exclusively to the manufacture of wines and of cider. Other important branches are the fattening of animals and the raising of fine blood stock.

The surplus product of fruits and vegetables is exported to the other provinces, a considerable portion being used for canning.

SAN FELIPE (Plaza y Teatro)

Vista Jeneral de los Andes

There are numerous mines and gold-bearing sands in the northern part, the working of which will be greatly facilitated when the projected railway lines are built. In the southern part there are also rich silver mines, and copper abounds throughout the province.

There are several metallurgical establishments for the smelting of the ores from the copper mines.

The valuation of the property in the province is as follows: urban $10,000,000, and rural $46,000,000.

PROVINCE OF VALPARAISO.

The area of this province is 1,660 square miles. It is divided into the departments of Valparaiso, Casablanca, Limache, and Quillota, and has a total population of 260,000 inhabitants.

The port of Valparaiso, the capital, with a population of 143,000 inhabitants, is the principal seaport of Chile and also of the whole Pacific coast of South America.

This city was originally built on a narrow beach at the foot of the hills nearly surrounding the bay. With the increase of population the city has gradually been extended both towards the hills and the sea. To-day, with its large and substantial edifices, its squares and public walks, its monuments and institutions, Valparaiso is regarded as one of the most advanced cities in South America.

It has a wharf which is considered even to-day a hydraulic work of great importance, notwithstanding that it was constructed more than twenty years ago, and vast and handsome custom warehouses for foreign and transit commerce. Hydraulic machinery is utilized for the handling of merchandise. There are also two floating docks for repairing vessels up to 4,000 tons capacity.

Valparaiso is the trade center for the whole country where the principal commercial houses and the most important navigation enterprises are located. There are seven national banks and three foreign ones, a commercial exchange, a stock exchange, and several savings banks.

The network of State and private telegraph lines puts Valparaiso in communication with the rest of the country, and the submarine cable lines with the whole world.

Numerous industrial establishments exist, among the principal ones being those of Lever, Murphy & Co., Balfour, Lyon & Co., Hardie & Co., and Morrison & Co., contractors of all kinds of machinery, equipments for railways, and even steel vessels of up to 1,000 tons capacity.

Valparaiso is a strongly fortified place with modern long-range guns. The headquarters of the Chile Navy are there as well as the Naval Academy, an institution possessing a magnificent building and a very complete equipment.

Among the public institutions of Valparaiso, besides its numerous educational institutions, asylums and hospitals, the Museum of Natural History, the Victoria Theater, the Volunteer Fire Brigade, etc., deserve mention.

Among the many municipal services is the item of water. Valparaiso was one of the first cities of South America to create a water supply by building a dam in a neighboring ravine in 1849. Later, to satisfy the needs of the increased population, pumps were placed to draw water from the underground strata at a distance of six miles; and finally, in recent years a large dam reservoir was built to collect rain-

BAHIA de VALPARAISO

VALPARAISO (Los Diques)

VALPARAISO
Avenida Errázuriz

VALPARAISO
Calle Esmeralda

ISLA JUAN FERNANDEZ

VIÑA DEL MAR

ESTACION de LIMACHE

VALLE de QUILLOTA

water. It is situated fifteen miles from the city at a height of 1,000 feet above sea-level. This work is just finished, occasioning an investment of $6,000,000. One hundred million tons of water are collected, sufficient to supply Valparaiso for three years, if necessary.

The so-called "separate" sewerage service was established in 1884. The sewage waters are collected at a low point in the city where it is raised by means of pumps into a conduit which discharges at a distant place in the bay. The rain-water is carried directly by subterranean drains to the sea.

The street-car service has existed in Valparaiso since 1860, and at that time the work was considered most progressive and daring on account of topographical difficulties that had to be contended with.

Not less hazardous, but of greater importance, was the building of the railway between Valparaiso and Santiago in 1851 on account of the grades, curves and tunnels believed at that time to be almost insuperable difficulties.

For all these reasons Valparaiso has led the other cities, not only of Chile but of South America. To its progressive spirit is due the introduction of the latest inventions and processes of modern civilization. It was the first city in South America to establish telegraph lines and to adopt gas (1856), to build aqueducts for the water supply, and street cars, etc. There, too, were begun negotiations for the construction of the Copiapó Railway, which was the first in South America (1849). Finally, there the first floating docks for the repair of vessels of large tonnage were constructed (1860).

Among the prominent monuments in Valparaiso are three of especial note. One of them to William Wheelright, the founder of the telegraph and steam navigation systems in Chile, and the other two erected to immortalize the glories of our military marine, represented by Lord Cochrane and Captain Prat.

Near Valparaiso, barely three miles distant, is Viña del Mar, which, with other adjacent towns, has become a resort with many beautiful residences. There are in Viña del Mar some industrial establishments, including a sugar refinery valued at $5,000,000, a stearine candle factory, and one for the extraction of cocoanut oil.

Quillota is an important town in the province with 17,000 inhabitants. The growing of fruits, vegetables and wines, and the raising of animals, are the principal industries. There is also a wrapping-paper factory. In neighboring localities rich beds of lime are worked and Portland cement is now manufactured there.

Limache, with 6,000 inhabitants, has similar agricultural products, and besides an important brewery in a substantial edifice with entirely modern machinery.

To this province belong the Islands of Juan Fernandez, in which group Robinson Crusoe's famous island is found. These islands are in regular communication with Valparaiso, and in them the fishing industry is beginning to be developed, there being at present a factory for canning lobsters and other sea-food products.

The climate in general is very mild during the different seasons and especially temperate in the city of Valparaiso. Water from the river Aconcagua and some of its tributaries irrigate a portion of the province. The raising of animals, the cultivation of alfalfa, wheat and barley and the making of wines are the chief agricultural occupations.

The estimated value of the properties is as follows: urban, $15,000,000, and rural, $32,000,000.

PROVINCE OF SANTIAGO.

The province of Santiago has an area of 5,212 square miles, is divided into the departments of Santiago, Victoria, Melipilla and Rancagua, and has a total population of 485,000 inhabitants.

The city of Santiago, capital of the Republic, is situated on a fertile plain at the base of the Cordillera of the Andes at an altitude of about 2,000 feet above the level of the sea, and occupies an area of eight square miles.

The population is of 320,000 inhabitants, and by the magnificence of its public and private buildings, the beauty of the public walks, and numerous public and private institutions, the importance of its trade, and the culture of the inhabitants, Santiago is one of the first cities of South America. It was founded on the 12th day of February, 1541, by the Spanish conqueror Don Pedro de Valdivia.

The river Mapocho, running east to west, crosses the city and its bed is canalized by a solid stone construction to a length of nearly 10,000 feet. The districts separated by the river are connected by numerous iron bridges.

The central and most important part of the city is situated between the Mapocho River and the Avenue of Las Delicias. This avenue is 13,000 feet long and 350 feet wide and constitutes one of the handsomest promenades in the city, adorned by beautiful trees, with magnificent and costly edifices on either side.

The following brief statement of the principal public buildings and of the most important institutions will give an idea of what the capital of the Republic contains.

The Moneda is the residence of the President of the Republic and the seat of most of the Ministries, the Treasury, and the Mint.

The National Congress or Palace of the Legislative Power is a modern construction of vast proportions and of magnificent architecture.

The Intendancy of the province and the City Hall occupy ample buildings, in which are installed the principal offices of the local administration.

The Cathedral, which is the Metropolitan Church, occupies an ancient edifice built by the Spaniards and has been completely reconstructed. The Archiepiscopal Palace adjoining the Cathedral is the residence of the head of the Chile Church.

The Post-office is a modern building where are the general offices of that branch of the public service.

The National Library, a large edifice covering 22,000 square feet, with a reading room accommodating 100 persons, contains more than 100,000 volumes, and has, besides, a department for the free loan of books.

SANTIAGO

SANTIAGO (Palacio de la Moneda)

SANTIAGO
Congreso Nacional

SANTIAGO
Museo Nacional

The Palace of the Court of Justice is the edifice in which the Supreme Court and the Courts of Appeal, some civil courts and other offices connected with them hold their sessions.

The General Staff of the Army occupies a building wherein are the offices of the headquarters of the Army and the barracks of the Body Guard, or Guard of Honor of the President.

Of the many other public edifices in Santiago mention might be made of the Municipal Theatre, one of the best in America, the Palace of the Exposition, the University, the Central Railway Station, the Cartridge Factory and the Ordnance Storehouse, the Medical School, the School of Arts and Trades, the Astronomical Observatory, the Agricultural Institute, the National Conservatory of Music, the Catholic Seminary, the Home for Orphans, the new Asylum for the Insane, and the edifice devoted to a large Boarding School for pupils of secondary instruction.

Among the private residences are many palaces of notable architecture.

Besides the Avenue of Las Delicias, already mentioned, the Hill of Santa Lucia, in a central part of the city, is an attractive public place. It is a small hill 250 feet high converted into a picturesque garden, with statues, an open-air theatre, restaurant, etc.

The Cousiño Park is a pleasant place of recreation covering 330 acres which was presented to the city by the millionaire Don Luis Cousiño.

Near this park there is a magnificent Racecourse, which is one of the most popular meeting places in the city.

The Quinta Normal de Agricultura (Agricultural School Farm) is another public place and center of instruction of the greatest importance in the country, established in 1842 and covering 320 acres. Within it are numerous scientific institutes: the Botanical Garden, which has 2,500 species of plants and four large conservatories; the Agricultural Institute, which has under its charge the higher branches of agriculture; the Agricultural Training School, whose principal aim is to create specialties in the agricultural line, having, with other dependencies, an important department of viticulture and viniculture with a vineyard, a building for vinification and vaults.

There are, besides, in the grounds of the School of Agriculture, in charge of specialists, an Institute of Animal Vaccine, a Laboratory of Carbunculous Virus, a Veterinary Institute and one of Vegetable Pathology, a Chemical Laboratory devoted exclusively to analysis connected with agriculture, a Museum of Natural History and a Zoological Garden.

There is also in the grounds of the Agricultural School, the Museum of Fine Arts, where the Annual Exhibition of Painting and of Sculpture is given.

The Agricultural School Farm is also the place where public and private expositions are continually taking place. The most important events which have taken place there are: the International Exposition of 1875, the National Expositions of 1884 and 1888, a milling machinery contest in 1890, and the Mining Exposition of 1894. Special competitions of agricultural machinery, horticulture, etc., take place there periodically, and every year an exhibition of blood animals and horticulture.

Agricultural instruction is free and supported by the Government.

Mining instruction is provided for in the higher courses in the University and also by means of a Practical School especially devoted to the training of mining superintendents.

Industrial instruction is in like manner fully developed. The higher teaching of engineering pertains to the University, and practical instruction belongs to the School of Arts and Trades. This Institute is one of the most important in the country, not only on account of its object, but also because of its scope.

There are also night schools for drawing, modelling in gypsum, electrical applications, etc., founded and managed by the Sociedad de Fomento Fabril, a society for the promotion of industries.

The professional instruction of women also has received the attention of the State, and is given especially in the Professional School for Girls, the practical courses being attended by more than 500 pupils daily.

The Commercial Technical Institute furnishes instruction to more than 500 pupils.

The teaching of the liberal professions is entrusted to the University, divided into three branches: Medicine, Law and Engineering, a faculty for each. The courses last six years for the first, five for the second and third. There are besides courses in pharmacy and dentistry. The teaching of medicine is very complete, and the special school of this branch of science is considered one of the most notable in South America.

There is an Institute of Pedagogy where professors for secondary instruction graduate, and two Normal Schools for male and female teachers for elementary instruction.

The most important of the establishments of secondary instruction is the National Institute, in which 1,200 pupils are annually educated.

Private initiative efficiently seconds the State in the spreading of popular instruction. Among other institutions is the Society of Primary Instruction, which maintains four model schools.

The district schools, those maintained by religious institutions, and the private schools furnish instruction to 25,000 pupils yearly on an average.

Instruction in the Arts is given by several establishments, the principal ones being the School of Fine Arts and the National Conservatory of Music.

Military instruction is an important branch, and is furnished in the School of Non-commissioned Officers where sergeants and corporals graduate, the Target-practice School, the Military School, where army officers graduate, and the War School, in which the higher courses of military art are followed.

Public Assistance is another important branch, and is cared for by a Board, the members of which lend their services gratuitously. This institution depends upon the funds furnished by the State, private charity, and the income from the property it owns. The principal establishments under the charge of the Board are: four hospitals, a home for invalids, a home for foundlings, a small-pox quarantine, and many dispensaries in different districts in the city, and two insane asylums, one

SANTIAGO
Plaza de Armas

SANTIAGO
Alameda de las Delicias

SANTIAGO
Cerro Santa Lucia

SANTIAGO
Parque Cousiño

under construction, and the schools for the blind and deaf-mutes. This Board has also the management of the General Cemetery, notable for its extent and the magnificence of the monuments it contains.

Besides these establishments maintained by the State, there are a considerable number of private institutions of charity, asylums, etc., for the assistance of the destitute.

There is a Society for the Protection of Infants, with an asylum for children, and which is erecting a very large building.

Hygiene and health are under the guidance of the Board of Public Hygiene, under whose dependency is the Institute of Hygiene. This important institution is divided into five departments: hygiene and statistics, chemistry and toxicology, microscopy and bacteriology, seroterapathy and disinfection. There are besides a Public Disinfectory for infectious diseases, a Municipal Chemical Laboratory for the study and analysis of alimentary substances. The Central Board of Vaccination is in Santiago, to whose labors is largely due the almost complete extinction of small-pox, which formerly caused great ravages.

There are several institutions for the improvement of the conditions of life; some building hygienic houses, others maintain savings banks and other recreation societies.

There is in Santiago an abundant supply of water of good quality.

The unevenness of the ground on which the city stands, and the abundance of water greatly assist the sewerage system which is undergoing complete tranformation and improvement.

The climate of Santiago is mild both in winter and summer, seldom falling below zero, and occasionally reaching 86 degrees Fahrenheit. Fixed winds from the east or from the west, that is to say, from the Cordillera or from the sea, alternately reduce the temperature. The rains are frequent in winter, although moderate. Frosts are not unknown, though snow seldom fall, notwithstanding that the Cordillera is so near and that in winter its summits are entirely covered by snow.

Manufacturing and trade have reached great development. There are seven national and three foreign banks, and three mortgage trust companies. Although the most wholesale houses are at Valparaiso, large transactions are also conducted at Santiago, principally in shares and bonds and in agricultural products.

There are numerous and properly organized establishments, such as mills, breweries, foundries and workshops, tanneries, flour and wood-working mills, factories for the manufacture of candles and soap, carriages, pharmaceutical preparations, cigars, biscuits, vermicelli, etc., and weaving mills of different grades.

The municipality has an annual average income of $2,000,000 for the various public expenditures.

Electric street cars have lately been established in Santiago, in place of the former system of horse-cars which have existed since 1863. The company which established this service has a capital of $15,000,000.

To further facilitate communication, the Government is completing a railway belt-line.

The telegraph service is maintained bythe State and four private companies. Three cable companies do the foreign work.

There are also two telephone companies.

In the neighborhood of Santiago there are several pleasure resorts and the thermal baths of Colina and Apoquindo.

The rivers Maipo and Mapocho, which run through the province, contribute towards the fertility of its soil, their waters being utilized by a system of well-built irrigation canals.

Wines, fruits and vegetables are produced in abundance in the department of Santiago.

Mining is also an important industry. There are many metallurgical establishments and mining centers, such as those of Las Condes and Maipo, with rich silver, lead and copper mines; those of Tiltil, Lampa and Batuco, of gold, silver and copper, and that of Pudahuel containing copper and hydraulic lime.

Among the other departments into which the province is divided, that of Victoria is noted for its extensive vineyards. The capital, San Bernardo, is a place of summer residences; the Military Target-Practice School, an important powder factory, various mills and other industries are located there.

The department of Melipilla is favorably known for the importance of its agricultural production.

The estimated value of the properties in the whole province is as follows: urban $260,000,000 and rural $400,000,000.

SANTIAGO (Palacio Edwards)

SANTIAGO (Palacio Guzman)

SANTIAGO
Palacio Concha y Toro

SANTIAGO (Pasaje Matte)

SANTIAGO
Galeria San Cárlos

SANTIAGO

Estacion Central de los Ferrocarriles

SANTIAGO (Cementerio Jeneral)

PROVINCE OF O'HIGGINS.

This province has an area of 2,529 square miles, is divided into the departments of Rancagua, Cachapoal and Maipo, and has a population of 100,000 inhabitants.

The capital is Rancagua, with 7,000 inhabitants.

The principal rivers are the Maipo and Cachapoal. There are two lakes: El Yeso in the Cordillera, and Aculeo at the foot of the coast range. This last has an area of sixteen square miles and considerable fishing is carried on there.

The fertility of this province is similar to that of Santiago; all kinds of agricultural products, cereals, grapes, fruits, etc., are raised there. The breeding of animals and the dairy industry have made great progress. Apiculture is established on a large scale.

Some important factories are established in this province, such as paper factories, canning factories, flour mills, etc. In the country hemp-spinning at home is widely practiced with very good results.

In the Cordillera there are some very good gold mines, and gold placer mining is carried on in the hills along the coast.

There are several metallurgical establishments for ore smelting.

The State Central Railway crosses the districts of this province, and puts it in communication with those of the north and south.

There are also two small local lines for the transportation of agricultural products.

The property of the province is appraised for the payment of the municipal tax as follows: urban property at $5,250,000; rural property at $50,000,000. The municipalities received $175,000 in 1899.

PROVINCE OF COLCHAGUA.

This province has an area of 3,803 square miles, is divided into the departments of Caupolican and San Fernando, and has a population of 180,000 inhabitants.

San Fernando is the capital, with 8,000 inhabitants. The second city in importance is Rengo, with 7,000 inhabitants. In this province are the Thermal Baths of Cauquenes, famous for the medicinal properties of the waters.

There are two minor ports on the coast, Matanzas and Pichilemu, which are dependencies of the Custom House of Valparaiso.

The rivers Cachapoal and Tinguiririca and their tributaries water this province in the level part, which is furrowed by irrigating canals. The cultivation of the high parts is very extensive, thanks to the abundant rains of that region.

Agriculture, which is the principal industry, consists of the cultivation of all kinds of cereals, cattle raising, cheese making, viticulture, and the production of wood and charcoal.

Some copper mines are worked in this province, especially in the valley of Tinguiririca, silver mines in the cañon of the river Teno, and gold mines on the coast. For the smelting of the ores there are several metallurgical establishments.

A coal mine has been developed on the banks of the Tinguiririca, at the foot of the Cordillera.

Gypsum also abounds. On the coast marine salt is exploited.

In general, the climate of this province is very mild.

The State Central Railway line crosses this province and puts it in communication with the rest of the Republic. There are, besides, two branch lines, one between San Fernando and Alcones (ninety-four miles), and the other, between Pelequen and Peumo (eighteen miles).

There is a road across the Cordillera of the Andes, by the pass of Tinguiririca, which puts this province in communication with rich copper mines existing in the Argentine Republic.

The urban property has been appraised at $5,000,000 and the rural at $50,000,000.

PROVINCE OF CURICÓ.

This province has an area of 2,915 square miles, is divided into the departments of Curicó and Vichiquen, with a population of 115,000 inhabitants.

Curicó, with 15,000 inhabitants, is the capital. It is a city possessing, among other important establishments, two commercial banks and several tanneries.

On the coast, on the Lake of Vichiquen, is the port of Llico.

The Teno and Lontue, which unite and form the Mataquito river, fertilize this province by means of numerous irrigating canals.

The production of cereals, vegetables and wines, and cattle raising, are among the chief industries. In the coast range of hills and in the Cordillera of the Andes there are natural forests, the timber being used for building purposes and railway sleepers. The valley of the Mataquito is very fertile, and on account of its being well sheltered, fruits produced there are of higher quality.

There are a few copper, silver and gold mines in the Cordillera and in the coast range of hills.

In the estuaries of the lakes of Vichiquen, Boyeruca and Bucalemu the production of salt is largely developed, the annual production of which exceeds 25,000 tons.

The State Central Railway crosses this province.

The urban property has been appraised at $6,000,000 and the rural at $32,000,000. The municipalities had in 1899 a total revenue of $180,000.

PROVINCE OF TALCA.

This province has an area of 3,668 square miles, is divided into the departments of Lontue, Talca, and Curepto, with a population of 165,000 inhabitants.

The capital is Talca, with 43,000 inhabitants, and it is the fourth city in importance in Chile.

This is a mediterranean province, and the port for its commerce is Constitución, which belongs to the neighboring province, with which there is railway communication.

There are several lakes and thermal springs.

The rivers in this province are: the Mataquito, the Lontue and the Maule. The last named is navigable by small crafts to Perales, a place situated 39 miles from Constitución, and by bigger vessels a part of that distance.

The State Central Railway runs through this province from north to south, and as has been stated, a branch 55 miles long reaches Banco de Arena, on the border of the river Maule, where steamers can take in freight for the other ports on the coast.

The cultivation of cereals, fruit trees and vines, etc., and cattle raising are the principal industries. Building woods abound.

The milling industry is quite developed with modern rolling mills.

Gold, silver and copper ores are mined, and there are besides important sulphur beds in the Cordillera.

The urban property has been valued at $16,000,000 and the rural at $41,000,000.

The revenue of the municipalities amounted in 1899 to $350,000.

Intendencia y Banco de Talca

PROVINCE OF LINARES.

This province has an area of 3,494 square miles, is divided into the departments of Loncomilla, Linares and Parral, and has a population of 120,000 inhabitants. Its capital is Linares, with 8,000 inhabitants.

Of other cities of the province, San Javier with 5,000 inhabitants, and Parral with 1,000, deserve mention. In the last named town there is a beet root sugar factory.

There are three thermal establishments in the province, Catillo, Panimávida and Vichy-Quinamávida, famous for their waters.

The river Maule and its tributaries water this province by an extensive system of canals.

The Central Railway traverses this province from north to south, and a branch runs from Parral to Cauquenes.

Agricultural production is well developed, cereals and vineyards are especially cultivated. Cattle and sheep raising has increased considerably.

Abundant forests are found in the Cordillera.

In this province there are silver and copper mines, and there are also gold placers.

The urban property has been appraised at $7,000,000 and the rural at $35,000,000.

PROVINCE OF MAULE.

This province has 2,934 square miles of area, and is divided into the departments of Constitución, Cauquenes and Itata, and has a population of 140,000 inhabitants.

Cauquenes is the capital, with 10,000 inhabitants. The principal port is Constitución with 8,000 inhabitants, and through it a great part of the agricultural exportation of the neighboring provinces takes place.

The port of Constitución is situated at the mouth of the river Maule, which, as has been said, is navigable for a great length. The port itself cannot at present be entered by vessels of more than 1,000 tons on account of the bar at the mouth of the river. In this port there are good shipyards.

The production of wines is the principal industry. Near Cauquenes cereals and fruit trees are cultivated, and on the hills of the coast-range, thanks to the regular rains in winter, wheat is sown on a large scale. Forests are abundant on the Cordillera and on the coast.

Mines also abound, and in the hills of the coast-range there are gold placers. There are several smelting establishments.

The urban property has been valued at $8,000,000 and the rural at $26,000,000.

PROVINCE OF ÑUBLE.

This province has an area of 3,556 square miles. It is divided into the departments of Chillan, Yungay, Bulnes and San Carlos, and has a population of 185,000 inhabitants.

Chillan, with 24,000 inhabitants, is the capital, and in importance the sixth city of the Republic. It has numerous industrial establishments, among them machine and tool factories, breweries, tanneries, mills and cooperages. It is an important mercantile center, and several fairs take place every week. A street railway connects with a section of the city called "Chillan Viejo," the population of which is 1,300 inhabitants.

Other important cities are: San Carlos with 8,000 inhabitants, Bulnes with 5,000, and Yungay with 3,000. In this province are the Thermal Baths of Chillan, which enjoy a great reputation.

The province is irrigated by large canals in connection with the rivers Ñuble, Chillan, Itata and Cato. Besides these irrigated parts there exist large tracts of land which, thanks to regular rainfalls, are used for growing of cereals, and pasture which is especially adapted for sheep raising.

This province is served by the State Central Railway.

The urban property is valued at $17,000,000, and the rural at $50,000,000.

The municipalities had in 1899 a total receipt of $500,000.

PROVINCE OF CONCEPCIÓN.

This province has an area of 3,532 square miles, a population of 225,000 inhabitants, and is divided into the departments of Coelemu, Puchacay, Rere, Concepción, Talcahuano and Lautaro.

It is the most important province in the south of Chile on account of the development of its commerce, the importance of the capital, and its numerous ports. On its coast are two of the largest bays in Chile, those of Talcahuano and Arauco. The first named is defended by fortifications, and in it are situated the ports of Talcahuano, Tomé and Penco.

The bay of Arauco includes the ports of Lota and Coronel, notable for their coal mines.

The city of Concepción, the capital of the province, is situated on the banks of the river Bio-bio, and has a population of 55,000 inhabitants, being in importance the third city of Chile. It has a street railway, a theatre, electric light, and other works of public interest. It possesses also some breweries, furniture and carriage factories, saw-mills, flour-mills, distilleries, etc.

The principal branch of the Central Railway reaches Concepción and terminates at the port of Talcahuano, which is distant about ten miles from that city.

Talcahuano, with 15,500 inhabitants, is a military port. It has a dry-dock for repairing war ships and mercantile vessels. Ships of the largest tonnage can enter this port. It is also a commercial port of first importance; the greater part of the merchandise for consumption in the cities of the interior passing through it. Its principal exports consist of products of the whole southern region.

The port of Tomé has 5,000 inhabitants, and owes its importance to the fact of its being near the region of the Itata river and other agricultural centers of importance. Through this port a very large quantity of wine is exported, there existing large and numerous wine vaults. One important woolen mill and other manufacturing establishments also exist.

Penco is a small port connected with Concepción by a railway ten miles in length. It is a place frequented as a seaside resort. There is also an important sugar refinery, and in the neighborhood are the coal mines of Cerro Verde.

Coronel has 5,000 inhabitants, and owes its importance to the coal mines. The mines of the "Compania Explotadora de Lota y Coronel," of "Puchoco," and of "Schwager" are the most important. The "Arauco Company, Limited" also ship their coal in this port.

CONCEPCION

CONCEPCION (Calle Comercio)

PUENTE del BIO-BIO

Lota has 10,000 inhabitants, and belongs almost entirely to the influential "Compania Explodatora de Lota y Coronel," which has its main office and shipping place there.

This company owns and works the richest coal mines in Chile, and has besides an establishment for smelting and refining copper, a brick and tube factory, a glass blowing establishment, also a dock yard. The company owns a line of railway between Lota and Coronel, a good wharf, and several steamers for carrying its products along the coast.

In Lota the Cousiño Park is located, one of the most notable private residences of the country, known for its admirable situation on a hill overlooking the sea, its gardens, its plantations and its buildings.

The river Bio-bio, navigable in winter for rafts and launches up to 150 miles from its mouth, and the rivers Laja, Diguillin and Itata, flow through the province of Concepción.

The principal industry is the making of wine; in the region north of the Bio-bio good light and heavy wines are produced. In the southern section and in the department of Lautaro timbers of good quality are cut and shipped.

Besides the State Central lines of railways, there are in this province one from Concepción to Penco, and another from the same city to Curanilahue, which serves for the exploitation of the coal mines of the Department of Lautaro. They aggregate a length of seventy-five miles.

The urban property, not including the coal mines, is appraised at $43,000,000, and the rural property at $53,000,000.

PROVINCE OF ARAUCO.

This province has 4,247 square miles of area, is divided into the departments of Arauco, Lebu and Cañate, and has a population of 75,000 inhabitants.

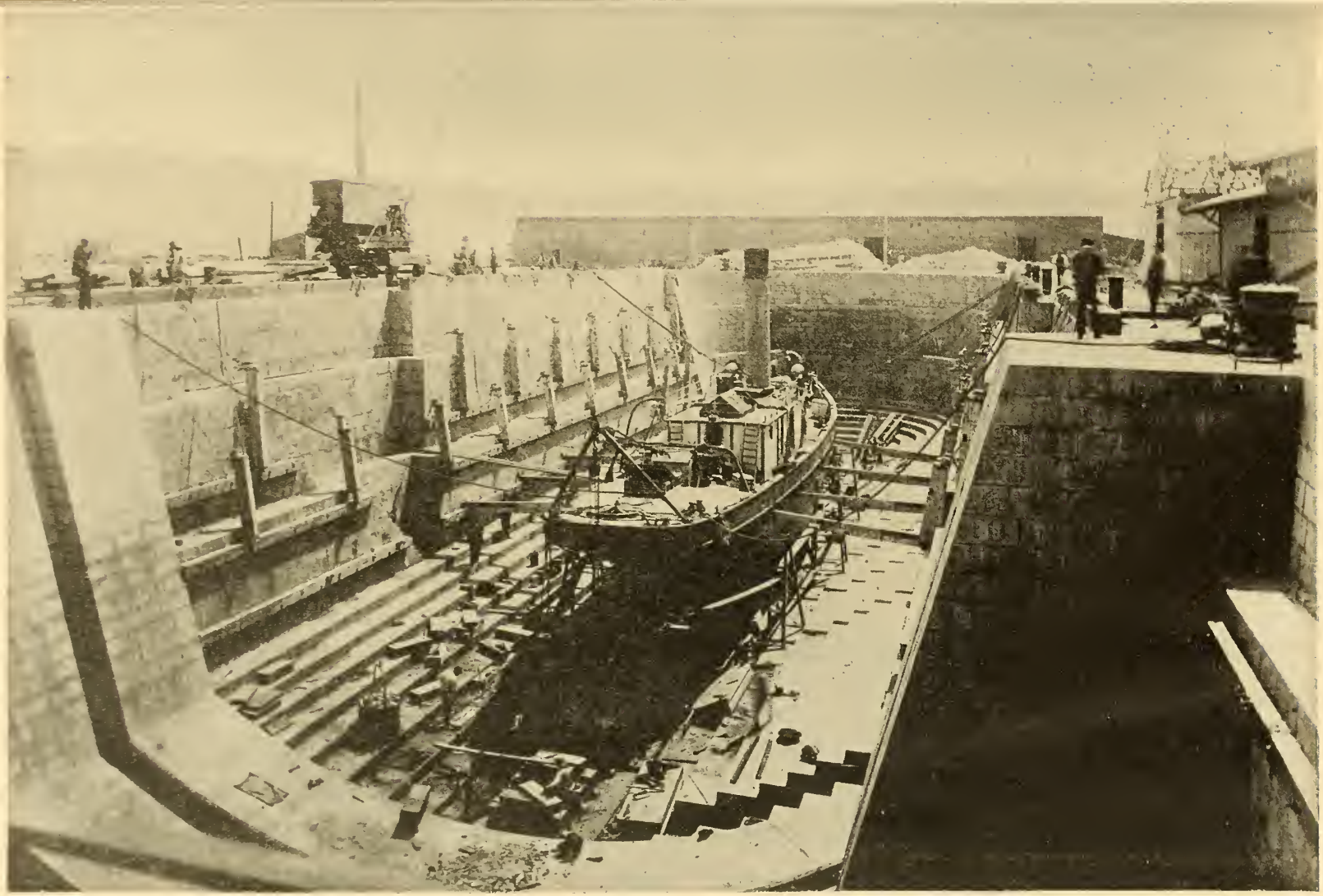
The port of Lebu, with 3,000 inhabitants, is situated at the mouth of the river of the same name, and is the capital and the principal city of the province. Other important cities are Arauco with 3,000 inhabitants, and Cañete with 2,000.

The island of Santa Maria, and La Mocha, have favorable conditions for agriculture, especially for raising cattle. They belong to this province. The riversare of short extent, the Carampangue and the Lebu being the principal ones.

This province, of which Lota is the principal center, contains many coal grounds, various minerals, kaolin, etc., and it abounds in lumber. The soil is favorable for the production of cereals and cattle raising. The Curanilahue Railway connects Arauco and Concepción. There is besides another railway between the coal mines of Huenapiden and the port of Yañez.

The urban property is valued at $500,000, and the rural property at $6,000,000, mining property not included. The receipts of the municipalities in 1899 were $70,000.

Vista Jeneral de Talcahuano



DIQUE de TALCAHUANO

CORONEL

LOTA BAJO
Tomado de Lota Alto

PARQUE de LOTA

PROVINCE OF BIO-BIO.

This province has 4,170 square miles, and it is divided into the departments of Laja, Nacimiento and Mulchen, and has a population of 110,000 inhabitants.

The city of Los Angeles is the capital, and it has 8,000 inhabitants. Other important cities are Mulchen with 4,500 inhabitants, and Nacimiento with 2,000.

The principal rivers of the province are the Bio-bio and the Laja, which also waters other provinces. In the Cordillera of the Andes is the lake of Laja, which serves as an outlet to a river of the same name. A beautiful waterfall is formed in the course of this river which may soon become of great value.

Agriculture is the principal industry of this region, wheat being raised in abundance. Its forests produce lumber for building purposes. The raising of cattle is also an important industry. This is the most southern province in which the vine is cultivated.

The Central Railway line connects this province with the rest of the country. There is, besides, a line between Santa Fe and Los Angeles 27 miles in length, and another between Coigue and Mulchen of the same length.

Mulchen possesses saw and flour mills, distilleries of alcohol, tanneries and other factories.

The urban property is valued at $3,950,000, and the rural at $21,950.

PROVINCE OF MALLECO.

This province has an area of 7,400 square miles, and is divided into the departments of Angol, Collipulli, Mariluán and Traiguen, with a population of 120,000 inhabitants.

The capital is Angol, with 8,000 inhabitants, situated at the foot of the eastern slopes of the Cordillera of Nahuelbuta, and at the junction of two rivers. Other important towns are Collipulli with 4,000 inhabitants, Traiguen with 6,000, and Victoria with 7,000.

Important saw-mills and other industries are to be found there.

The soil is adapted chiefly to the cultivation of wheat and the raising of cattle; besides that there are abundant forests. In this province are found gold deposits actually worked.

There are several lakes and rivers; of the latter the most important is the Cautin, which, with other tributaries further on in its course, forms the Imperial.

The urban property has been valued at $8,000,000, and the rural at $39,000,000. In 1899 the municipalities showed a total receipt of $159,000.

PUENTE del MALLECO

PROVINCE OF CAUTIN.

This province has an area of 3,127 square miles, is divided into the departments of Temuco and Imperial, and has a population of 100,000 inhabitants.

The city of Tamuco is the capital; it has 9,000 inhabitants, and is the center of great commercial activity. It has flour and saw-mills, tanneries and other manufactories. Other important cities are Nueva Imperial with 3,000 inhabitants, at the junction of the Cholchol and Carahue rivers. On the Imperial river is the port of Carahue with 2,000 inhabitants, and Lautaro on the bank of the Cautin with 3,500 inhabitants.

The Imperial river is navigable throughout its course, and there is a regular line of steamers between Carahue and Valparaiso.

There are numerous small lakes, and one of great importance called Villarica, having a surface of 100 square miles, at the base of a volcano of the same name, 1,650 feet above the sea level.

This province is fertile, produces considerable wheat, and has extensive forests, with several saw-mills in operation. The Central Line of railway, with a southern branch in construction, connects Temuco with the rest of the country. A branch from Temuco to Carahue is also under construction.

The urban property is valued at $7,600,000, and the rural at $16,000,000.

PROVINCE OF VALDIVIA.

This province has an area of 8,300 square miles, is divided into the departments of Valdivia and Union, and has a population of 75,000 inhabitants.

The capital is Valdivia, with 8,000 inhabitants, and is situated on the river of the same name, 12 miles from the port of Corral, on the mouth of the said river. This city contains large manufacturing establishments, notably tanneries, shoe factories, breweries, mills, salt, packing houses, a cabinet factory, etc. The shipyards existing there are well advanced, building river steamers, sailing vessels, etc., but the principal industries are the tanneries, which annually export to Germany more than 2,000 tons of sole leather, and breweries, the products of which are consumed throughout the country and exported to foreign countries. Messrs. Andwanter & Co.'s brewery, one of the largest in the country, deserves special mention.

Another important city of the province is La Union with 3,000 inhabitants, situated near the river Bueno. In this city are important distilleries of alcohol, mills and tanneries. Forests abound; the bark of some of the trees contain much tannin, which is largely used in tanning. Beds of manganese ores and soft coal exist.

In this province important lakes are found—that of Ranco, with an area of 200 miles being the most important. There are also numerous rivers, some of them carrying much water, as the Tolten, the Bueno, and the Valdivia, or Calle-Calle, already mentioned. The river Bueno, which rises in the lake of Ranco, has a run of 80 miles, 50 of which are navigable.

A railroad runs through this province between Valdivia, La Union and Osorno. A line to connect this region with the rest of the country is now being constructed. This province, settled fifty years ago by German colonies, is distinguished for its industrial progress.

The urban property is valued at $7,000,000, and the rural at $8,000,000. The municipalities had in 1899 a total receipt of $100,000.

VALDIVIA

OSORNO

PUERTO MONTT

CALBUCO

PROVINCE OF LLANQUIHUE.

This province has an area of 7,820 square miles, and is divided into the departments of Osorno, Llanquihue and Carelmapu, and has a population of 95,000 inhabitants.

The capital is Puerto Montt, with 5,000 inhabitants, on the Gulf of Reloncaví. It is a port of exit for the products of the region around the Lake of Llanquihue. There are several tanneries, breweries, distilleries and other industries.

Osorno is another city of importance, and is one of the most important agricultural and industrial centers in the southern region. There are large alcohol distilleries, tanneries and packing houses. The growing of cereals and raising of cattle is done extensively. An important branch is the cultivation of apple trees especially for the making of cider.

Calbuco is a small port in the same province, whose principal industry is the canning of poultry, meat and shell fish.

In this province is the lake Llanquihue, the largest in the country, having an area of 300 square miles. Several small towns are situated on its shores, and a regular service of steamers is maintained.

The principal rivers are the Bueno, which forms the boundary of the province of Valdivia; the Rahue, the Maullin, which flows out of the lake of Llanquihue, and is navigable for more than 31 miles in its course, and the Palena, one of the largest in Chile, also navigable for a long distance.

Cereals, potatoes and apples are grown, but on account of the damp and rainy climate their development is retarded. The raising of cattle and bees and butter-making are important industries. Forests in this region abound in good woods, and large quantities are exported annually to cities in the north of Chile. In Carelmapu and other places along the coast, gold is obtained by washing sand.

The urban property is valued at $5,500,000, and the rural at $13,000,000.

PROVINCE OF CHILOE.

This province includes the island of the same name, and the archipelagoes of Chonos and Guaytecas. The channel of Chacao separates these islands from the continent. This channel, and others to the south of it, serve for the passage of vessels that wish to follow the route of Magellan's Straits and avoid the heavy seas and storms that are frequent in those latitudes on the Pacific. The area of this province is 6,000 square miles, and it is divided into the departments of Anend, Castro and Quinchao.

The capital is the port of Ancud, which has a population of 3,500 inhabitants. The second city of the province is the port of Castro, with 2,000 inhabitants.

Agriculture in this region has not attained the progress of which it would be capable; nevertheless, the production of potatoes is abundant, and they are noted for their good quality. Felling timber is also an important industry, and the lumber is exported for consumption to the northern provinces. Cereals and fruits, especially apples which are used for making cider, are likewise produced.

The sea abounds in fish and shell fish, and fishing is one of the principal industries, furnishing a livelihood for the population. There are places where gold is washed, and coal exists but is not worked.

The urban property of Chiloé has been valued at $200,000, and the rural at $2,000,000.

ANCUD

PUNTA ARENAS

TERRITORY OF MAGALLANES.

The extensive region that forms the most southern part of the continent bathed by the Pacific Ocean is known by the name of the Territory of Colonization of Magellanes, and includes an area of 78,000 square miles. Its population is 12,000 inhabitants. This territory is divided into two parts, the Western Section and the Archipelago of Tierra del Fuego, 11,000 square miles of which belong to Chile. Both parts are separated by the Straits of Magellan, which in its whole length is under the sovereignty of Chile.

The capital of the territory is the port of Punta Arenas, whose commercial importance increases from day to day, having at present a population of 6,000 inhabitants. It has water works, electric light, telephones, and telegraph as far as Point Dungeness, a place situated at the entrance to the Straits on the Atlantic. A few manufactories of different kinds, a brewery, brick-yard, foundry, packing house, and dock yards are established there.

Steamer lines, running between Europe and Chile, as well as to or from Australia, visit Punta Arenas. A regular line of steamers, attended by two transports of the national navy, has recently been established with the object of promoting commerce with other ports of Chile. The local maritime traffic is carried on by means of a fleet of small steamers belonging to private enterprises.

Owing to the latitude in which this region is situated, agriculture offers no other occupation than the raising of cattle and sheep. The production of wool constitutes one of the principal resources of the country. The cutting of woods has also some importance. Trade in skins and furs, as well as of ostrich feathers, reaches some proportions.

Deposits of gold-bearing sand and seams of coal are found in Magallanes. The exploitation of the last named material has led to the opening of a large mine, and to the building of the first railway in that far distant region.

The lands belongs to the State, and are let out to private enterprises. In Tierra del Fuego alone 80 square miles have been leased.

The ownership of the land, and to elevate the territory to the rank of a province, are problems occupying the Government's attention at present. Their solution will create a strong impulse for developing this extensive and important region on a larger scale, and in which a start has already been made with much gratifying results.

GENERAL CATALOGUE

OF THE

CHILE EXHIBITS.

AGRICULTURAL EXHIBIT.

GENERAL CATALOGUE.

DIVISION I.

AGRICULTURAL AND DAIRY PRODUCTS.

GROUP 1—FARM CROPS.

CLASS 1—Grasses and Forage Crops.

ORTUZAR DE VALDES, A. (Señora). Cunaco-Colchagua.
No. 1—Red clover seed.

VALDES V., Ismael. Cunaco-Colchagua.
No. 2—White clover seed.
No. 3—Red clover seed.

QUINTA NORMAL DE AGRICULTURA. Santiago.
No. 4—White clover seed.
No. 5—Trebillo seed.

CABALLERO, E. San Felipe-Aconcagua.
No. 6—Yellow clover seed.

BARRIENTOS, A. Osorno.
No. 7—German knot-grass seed (*Dactylus Glomerata*).

PIZARRO Y PIRAINO. Cerro Verde, Aconcagua.
No. 8—Alfalfa hay (pressed in bales).

GANDARILLAS, Alberto. Vallenar.
No. 9—Alfalfa hay (pressed in bales).

MACKENTUM, NEVES & CO. Los Andes.
No. 10—Alfalfa hay (pressed in bales).

COMITE NACIONAL DE PROPAGANDA DE ABONOS. Santiago.

No. 11—White clover seed.
No. 12—Red clover seed.
No. 13—Alfalfa seed.
No. 14—White clover seed from Chillan.
No. 15—Red clover seed.
No. 16—Honey-grass seed from Osorno.
No. 17—German knot-grass seed (*Dactylus Glomerata*).

COMMISSION OF CHILE. Santiago.

No. 18—Red clover seed from Chillan.
No. 19—Honey-grass seed from Osorno.
No. 20—Alfalfa hay (pressed in bales) from Pirque.

CLASS 2—Cereals.

COMMISSION OF CHILE. Santiago.

WHEAT.

No. 21—Linseed, from Chillan.
No. 22—Linseed, from Angol.
No. 23—Egyptian, from Chillan.
No. 24—Oregon, from Chillan.
No. 25—Oregon, from Chillan.
No. 26—Japhet, from Santiago.
No. 27—Japhet, from Chillan.
No. 28—De Crepi, from Osorno.
No. 29—Canada Spring, from Osorno.
No. 30—Australian, from Chillan.
No. 31—Red, from Chillan.
No. 32—American, from Chillan.
No. 33—American, from Chillan.
No. 34—White, from Chillan.
No. 35—Estaquilla, from Santiago.
No. 36—White Victoria, from Chillan.
No. 37—Rieti's Bearded-ear, from Osorno.
No. 38—Stand-up, from Chillan.
No. 39—Broad-leaved Cape, from Osorno.
No. 40—Red square-head, from Osorno.
No. 41—Red square-head, from Chillan.
No. 42—Red square-head, from Angol.
No. 43—Chinchilla, from Angol.
No. 44—Chino, from Angol.
No. 45—Chino, from Osorno.
No. 46—Chino, from Chillan.
No. 47—Red Rieti, from Chillan.

No. 48—Nonette de Lauzanne, from Chillan.
No. 49—Nonette de Lauzanne, from Osorno.
No. 50—Nonette de Lauzanne, from Angol.
No. 51—White Roseau, from Osorno.
No. 52—White Roseau, from Chillan.
No. 53—White stiff-stemmed, from Angol.
No. 54—California, from Chillan.
No. 55—California, from Angol.
No. 56—Bordeaux, from Chillan.
No. 57—Bordeaux, from Angol.
No. 58—Golden drop, from Angol.
No. 59—Saxon oblong, from Vallenar.
No. 60—Red Swedish, from Chillan.
No. 61—Candeal, from Santiago.
No. 62—White bearded, from Osorno.
No. 63—Golden drop, from Angol.

BARLEY.

No. 64—From Casablanca.
No. 65—English, from Osorno.
No. 66—Common, from La Serena.
No. 67—Common, from San Felipe-Aconcagua.
No. 68—Common, from San Felipe-Aconcagua.
No. 69—Common, from Angol.
No. 70—Vermont Champion, from Angol.
No. 71—Goldthorpe, from Angol.

RYE.

No. 72—Common, from Osorno.
No. 73—Common, from Osorno.

OATS.

No. 74—White, from Osorno.
No. 75—White, from Angol.

CORN.

No. 76—Yellow, from Chillan.
No. 77—Yellow, from Nos.
No. 78—Linseed, from Chillan.

BEANS.

No. 79—Collection of 100 samples.
No. 80—Pallares, from Chillan.
No. 81—Avalitos, from Chillan.

No. 82—Yellow, from Chillan.
No. 83—Araucanian, from Chillan.
No. 84—Percales, from Chillan.
No. 85—Gregorianos, from Chillan.
No. 86—Rice, from Chillan.
No. 87—Canary, from Chillan.
No. 88—Stringless bay, from Angol.
No. 89—Stringless black and white, from Chillan.
No. 90—Arvejillos, from Chillan.
No. 91—Flageolet, from Chillan.
No. 92—Burritos (commercial sample), from Santiago.
No. 93—Small bay (commercial sample), from Santiago.
No. 94—Gregorianos, from Chillan.
No. 95—Caballeros, from Chillan.
No. 96—Caballeros, from San Felipe-Aconcagua.
No. 97—Manteca, from Angol.
No. 98—Coscorrones (commercial sample), from Santiago.
No. 99—Caballeros (commercial sample), from Santiago.

PEAS.

No. 100—Imperial, from Chillan.
No. 101—Petit-pois, from Cocharcas-Chillan.
No. 102—Common, from Chillan.
No. 103—Small, from Chillan.
No. 104—Large white, from Angol.
No. 105—Common, from Chillan.
No. 106—Common white, from Angol.
No. 107—White, from Chillan.
No. 108—Common, from Osorno.
No. 109—Stringless, from Chillan.
No. 110—Sweet, from Chillan.

VARIOUS.

No. 111—Large lentils, from Chillan.
No. 112—Common Garbanzos (Spanish beans), from Santiago.
No. 113—Common Garbanzos (Spanish beans), from Chillan.
No. 114—Common buckwheat, from Angol.
No. 115—Common broad beans, from Chillan.
No. 116—Common broad beans, from Chillan.
No. 117—Quinoa (*Chenopodium*), from Colchagua.

COMITE NACIONAL DE PROPAGANDA DE ABONOS. Santiago. Collection of cereals:

THE FIRST ZONE (FROM TACNA TO SANTIAGO PROVINCE).

WHEAT.

No. 118—White hard-stemmed.
No. 119—Oregon.
No. 120—Bordeaux.
No. 121—Xeres.
No. 122—Roseau.
No. 123—Rieti's bearded.
No. 124—Touzelle Anone.
No. 125—Swedish.
No. 126—Saumur of Autumn.
No. 127—Hard yellow.
No. 128—Hard yellow.
No. 129—Red St. Laud.
No. 130—Stand-up.
No. 131—Red Touzelle of Provence.
No. 132—Linseed white.
No. 133—Belotourka.
No. 134—Square-head.
No. 135—Common white.
No. 136—Common white.
No. 137—Bearded Swedish of March.
No. 138—White Victoria.
No. 139—Bordier's Hybrid.
No. 140—Large-leaved Cape.
No. 141—Red-bearded of Spain.
No. 142—Japhet.
No. 143—Hybrid Dattel.
No. 144—Saumur of March.
No. 145—Noé.
No. 146—Nonette of Lauzanne.
No. 147—Crepi.
No. 148—Chiddam of March.
No. 149—Black, hard.
No. 150—Australian.
No. 151—Black-bearded, hard.
No. 152—Hard.
No. 153—A épi carrée (square head).
No. 154—Rouge de St. Laud.
No. 155—Yellow Candeal.
No. 156—Araucanian Mountain.
No. 157—Saxon.
No. 158—Moorish.
No. 159—Boiled wheat.
No. 160—Starch.

BARLEY.

No. 161—Moravian.
No. 162—Square head of spring.
No. 163—From Casablanca.
No. 164—English.
No. 165—Richardson's English Chevalier.
No. 166—French Chevalier.
No. 167—Pedigree.
No. 168—Common.
No. 169—Common.
No. 170—Chevalier.

OATS.

No. 171—Giant yellow.
No. 172—White Hungarian.
No. 173—Black Brie.
No. 174—White improved Ligowo.
No. 175—Early Siberian.
No. 176—Very early Australian.
No. 177—Poland.
No. 178—Lentils.

MAIZE.

No. 179—White American.
No. 180—Scotch sweet.
No. 181—Yellow Russian.
No. 182—Yellow American.
No. 183—White pearl.
No. 184—Improved.
No. 185—Common yellow.
No. 186—Garbanzos (Spanish beans).
No. 187—Garbanzos (Spanish beans).
No. 188—Garbanzos (Spanish beans).

BROAD BEANS.

No. 189—From Talagante.
No. 190—From Sevilla.
No. 191—Sweet Water.
No. 192—Early of Erfurt.
No. 193—From Windsor.

BEANS.

No. 194—Caballeros.
No. 195—Caballeros.
No. 196—Caballeros.
No. 197—Pallares.
No. 198—Coscorrones.

No. 199—Triguitos.
No. 200—Spanish.
No. 201—Without equal.
No. 202—Black Asget.
No. 203—Valentine.
No. 204—Predome.
No. 205—Espiritu Santo.
No. 206—Hundred for one.
No. 207—White Flageolet.
No. 208—Green Flageolet.
No. 209—Black Belgium.
No. 210—Mantecata.
No. 211—Soisson.
No. 212—Clavel.
No. 213—Anjelitos.
No. 214—Large green.
No. 215—Cosecheros.
No. 216—Araucanian.

PEAS.

No. 217—Eclipse.
No. 218—Prince Albert.
No. 219—Large.
No. 220—The Conqueror.
No. 221—Telephone.
No. 222—Clamert.
No. 223—Marvel of America.
No. 224—MacLean.

VARIOUS.

No. 225—Canary seed.
No. 226—Linseed.
No. 227—Rope seed.
No. 228—Cummins.
No. 229—Hemp seed.
No. 230—Castor Oil seed.

THE SECOND ZONE (FROM O'HIGGINS TO TALCA PROVINCE).

WHEAT.

No. 231—White.
No. 232—White.
No. 233—White.
No. 234—Bordeaux.

BARLEY.

No. 235—English.
No. 236—Common.
No. 237—Common.

BEANS.

No. 238—Pallares.

PEAS.

No. 239—Common.
No. 240—Petit-pois (March).

THE THIRD ZONE (FROM LINARES TO CONCEPCION PROVINCE)

BEANS.

No. 241—Flageolet.
No. 242—Stringless, white and brown.
No. 243—Small bay, threadless.
No. 244—Gregorianos.
No. 245—Pallares.
No. 246—Yellow.
No. 247—Stringless, black and white.
No. 248—Avalitos.
No. 249—Araucanian.
No. 250—Canary.
No. 251—Percales.
No. 252—Caballeros.
No. 253—Rice.

PEAS.

No. 254—Petit-pois.
No. 255—Imperial.
No. 256—Common.
No. 257—Stringless.

VARIOUS.

No. 258—Linseed.
No. 259—Rye.
No. 260—Broad beans.
No. 261—Garbanzos (Spanish beans).
No. 262—Lentils, large.

WHEAT.

No. 263—Red.
No. 264—Red.
No. 265—Nonette.
No. 266—Mountain's happiness.
No. 267—Gold grain of the plains.
No. 268—Gold grain of the mountains.
No. 269—Chiddam.
No. 270—Chine of the plains.
No. 271—Saumur.
No. 272—Red Swedish.
No. 273—California.
No. 274—Touzelle Anone.
No. 275—Chine.
No. 276—Linseed wheat of the plains.
No. 277—Square head.
No. 278—Swedish.
No. 279—Square head of Heine.
No. 280—Nonette de Lauzanne.
No. 281—White.
No. 282—White.
No. 283—White.
No. 284—Bordeaux.
No. 285—Bordeaux.
No. 286—Goldendrop.
No. 287—Blanquillo.
No. 288—Australia.
No. 289—Japhet.
No. 290—Rieti.
No. 291—Victoria.
No. 292—Touzelle.
No. 293—Stand-up.
No. 294—Linseed.
No. 295—Oregon.
No. 296—California.
No. 297—Feliz.
No. 298—Americano.
No. 299—Roseau.
No. 300—Gold.
No. 301—Estaquilla (shoe-peg).
No. 302—Square head.
No. 303—Canadá.
No. 304—Egypt.
No. 305—Hibrido Bordier.

BEANS.

No. 306—Pallares.
No. 307—Arvejillos.
No. 308—Avalitos.

RYE AND BUCKWHEAT.

No. 309—Rye of the plains.
No. 310—Rye of the mountains.
No. 311—Buckwheat.

BARLEY.

No. 312—Chilian brewing.
No. 313—Goldthorpe.
No. 314—Vermont Champion.

OATS.

No. 315—White.
No. 316—White.
No. 317—Black.
No. 318—Light brown.

PEAS.

No. 319—Small.
No. 320—Lentil.
No. 321—Common.
No. 322—Small peas of the plains.
No. 323—Common white.

BROAD BEANS,

No. 324—Broad beans, large.
No. 325—Broad beans, small.

THE FIFTH ZONE (FROM VALDIVIA TO THE SOUTH).

WHEAT.

No. 326—White Victoria.
No. 327—White Victoria.
No. 328—Red Square-head.
No. 329—Red Square-head.
No. 330—White Osorno.
No. 331—Red Rietis.
No. 332—Red Touselle Anone.
No. 333—White Roseau.
No. 334—White stand-up.
No. 335—White bearded.
No. 336—Japhet.
No. 337—Broad-leaved of cape.

VARIOUS.

No. 338—Barley, common.
No. 339—Rye.
No. 340—Oats.
No. 341—Broad beans, small.
No. 342—Linseed, common.
No. 343—Peas, common.
No. 344—Peas, gold grain.
No. 345—Beans, Flageolet.
No. 346—Maize, common.

VALDEZ, Elias. Calleuque-Colchagua.

WHEAT.

No. 347—Castilla.
No. 348—Belotourka.
No. 349—Yellow black bearded.
No. 350—Candeal.

BEANS.

No. 351—Spotted.
No. 352—Lupine.
No. 353—Enredaderas.
No. 354—Pallares.
No. 355—White purple, spotted.
No. 356—Early yellow.
No. 357—White Flageolet.
No. 358—Chocolate.
No. 359—Red.
No. 360—White Bonnemain.
No. 361—Correlmenos.

CORN.

No. 362—White.
No. 363—Yellow.
No. 364—Pop.

VARIOUS.

No. 365—Giant stringless peas.
No. 366—Common French peas.
No. 367—Early Italian lentils.
No. 368—Common buckwheat.
No. 369—Garbanzos (Spanish beans).

ESCUELA AGRICOLA. Concepción.

WHEAT.

No. 370—Roseau.
No. 371—Stand-up.
No. 372—Square-head.
No. 373—Red Touzelle de Provence.
No. 374—White Victoria.
No. 375—Red St. Laud.
No. 376—California.

BEANS.

No. 377—Soisson.
No. 378—Flageolet.
No. 379—Black Belgian.
No. 380—Sevilla broad.

VARIOUS.

No. 381—Chevalier barley.
No. 382—Early Siberian oats.
No. 383—Common rye.
No. 384—Sweet European corn.
No. 385—French peas.
No. 386—Triumph peas.
No. 387—Dark Puchacay peas.
No. 388—Pink special lentils.
No. 389—Sweet black millet.
No. 390—Riga linseed.
No. 391—Buckwheat.
No. 392—Hops.
No. 393—Beet seed.
No. 394—Collection of garden and orchard seeds.

QUINTA NORMAL DE AGRICULTURA. Santiago.

WHEAT.

No. 395—Touzelle Anone.
No. 396—Nonette de Lauzanne.
No. 397—Bordeaux.
No. 398—Nonette de Lauzanne.
No. 399—Japhet.
No. 400—Dattels hybrid.
No. 401—Cañaveral.
No. 402—Autumn of Saumur.
No. 403—St. Laud red.
No. 404—Schaleys worp grown.
No. 405—Rieti's bearded-ear.
No. 406—White Victoria.

No. 407—Noè.
No. 408—Red Touzelle of Provence.
No. 409—Red bearded of Spain.
No. 410—Chiddam of March.
No. 411—Stand-up.
No. 412—Broad-leaved cape.
No. 413—Saumur of March.
No. 414—Red bearded of March.
No. 415—Belotourka.
No. 416—Jerez.
No. 417—Square-head.
No. 418—Bordier hybrid.
No. 419—Rigid stem.

BARLEY.

No. 420—Hallets pedigree.
No. 421—Chevalier French.
No. 422—Spring square-head.
No. 423—Moravian.
No. 424—English Chevalier.

OATS.

No. 425—Yellow.
No. 426—Early Siberian.
No. 427—White Hungarian.
No. 428—Black Brie.
No. 429—White Ligowo.
No. 430—Very early Australian.
No. 431—Poland.

CORN.

No. 432—White pearl.
No. 433—Early red.
No. 434—Small early yellow.

BEANS.

No. 435—Black Belgium.
No. 436—Black Algerian.
No. 437—Valentine.
No. 438—Wheat.
No. 439—Hundred for one.
No. 440—White.
No. 441—Small Coscorrones.

VARIOUS.

No. 442—Wheat rye.
No. 443—Linseed.
No. 444—Flax seed.

No. 445—Chicharros peas.
No. 446—Petit-pois peas.
No. 447—Large lentils.
No. 448—Large Garbanzos (Spanish beans).
No. 449—Silver buckwheat.
No. 450—Tartarian buckwheat.
No. 451—Common broad beans.
No. 452—Vicia Velluda.

ORTUZAR DE VALDES, A. (Señora). Cunaco–Colchagua.
No. 453—Oregon wheat.
No. 454—Common Garbanzos (Spanish beans).

BARROS–LARRAIN, F. Cunaco–Colchagua.
No. 455—Australian wheat.

VALDIVIESO, R. Panguilemu–Talca.
No. 456. Australian wheat.

DEVOTO, L. Rancagua.
No. 457—White wheat.

CUEVAS DE ORTUZAR (Señora). San Antonio de Petrel–Colchagua.
No. 458—White wheat.
No. 459—Garbanzos (Spanish beans).

ROSS DE EDWARDS, J. (Señora). Nancagua–Colchagua.
No. 460—White wheat.
No. 461—Chevalier barley.

SALAS UNDURRAGA, E. Los Nogales–Quillota.
No. 462—Long hard wheat.
No. 463—Small bay beans.

CORREA, A. El Espino–Aconcagua.
No. 464—Round hard wheat.
No. 465—Common barley.

BUZETA, Luis. El Rosario de Chena–Santiago.
No. 466—Rigid stemmed wheat.
No. 467—Candeal wheat.
No. 468—Yellow corn.
No. 469—Large bay beans.

ALVAREZ, P. Imperial–Vallenar.
No. 470—Rigid stemmed wheat.
No. 471—Common barley.

PINTO R., M. A. Turrion–Elqui.

WHEAT.

No. 472—Moorish.
No. 473—Black round–hard.
No. 474—Candeal.

BEANS.

No. 475—Mujos.
No. 476—Angel.
No. 477—Cosecheros.
No. 478—Green.
No. 479—Clavel.

PEAS.

No. 480—Large.
No. 481—Common.
No. 482—Green.

VALENZUELA, J. de D. and M. Olivar–Caupolican.
No. 483—Hallado wheat.

VALENZUELA, C. Algarrobo–Rancagua.
No. 484—Coscorrones beans.
No. 485—Soisson beans.

CABALLERO, E. San Felipe–Aconcagua.
No. 486—Candeal wheat.
No. 487—Common barley.
No. 488—Flax seed.
No. 489—Lentils.

PRIDA, F. de la. El Tambo–Colchagua.
No. 490—Chevalier barley.

SUBERCASSEAUX DE CONCHA, E. (Señora). Codao-O'Higgins.
No. 491—English barley.
No. 492—Common barley.

ROJAS MAGALLANES, Victorino. Trapiche-Ovalle.

BEANS.

No. 493—White.
No. 494—Green.
No. 495—Clavel.
No. 496—Vaca.
No. 497—Peumo.
No. 498—Mono.

No. 499—Common barley.
No. 500—Castor oil seed.
No. 501—Red corn.
No. 502—Large peas.

SANCHEZ, R. Lo Herrera-Santiago.
No. 503—Chevalier barley.

AVILA, I. Peñaflor-Santiago.
No. 504—Early corn.
No. 505—Morocho corn.
No. 506—Chinoclo corn.
No. 507—Millet (sorghum).
No. 508—Coscorrones beans.
No. 509—Ponderados beans.

GAMBOA, B. Pelequen-O'Higgins.
No. 510—Canary seed.
No. 511—Caballeros beans.

ZANZI & CO. La Serena.
No. 512—Large castor oil seed.
No. 513—Small castor oil seed.

SAUVAGET, V. and CALDERON, E. Caren-La Serena.
No. 514—Castor oil seed.

MARTEL, M. La Palma-Aconcagua.
No. 515—Flax seed.

CHARME, E. Requinoa-O'Higgins.
No. 516—Flax seed.

IRRIBARREN, A. La Palma-Elqui.
No. 517—Canada lentils.

CLASS 3.—Tubers and Root Crops.

QUINTA NORMAL DE AGRICULTURA. Santiago.

POTATOES.

No. 518—Early American.
No. 519—Fine Bruce.
No. 520—Victoria Augusta.
No. 521—Jute of Paulsen.
No. 522—Anderse.
No. 523—Quick-growing Royal.

No. 524—Early Beauty.
No. 525—Queen Topaze.
No. 526—End of Century.
No. 527—General Gordon.
No. 528—Professor Maerker.
No. 529—Richter's Imperator.
No. 530—Blue Giant of Paulsen.
No. 531—Yellow Norwegian.
No. 532—Doma.
No. 533—Counsellor Thiel.
No. 534—Bonkza.
No. 535—Tall Landjuvel.
No. 536—Tall Silesia.
No. 537—Domin.
No. 538—Tall Pluto.
No. 539—Doman.
No. 540—Tall Schultz Lupitz.
No. 541—Ullvanal.
No. 542—Rosadal.
No. 543—Early Zwickau.

COMMISSION OF CHILE. Santiago.

POTATOES.

No. 544—Red, from Chillan.
No. 545—Long White, from Osorno.
No. 546—Coraila, from Osorno.
No. 547—Richter's Imperator, from Osorno.
No. 548—Rose of Germany, from Osorno.
No. 549—Butterfly, from San Felipe.
No. 550—Swiss, from Chillan.
No. 551—Pehuenchas, from Chillan.
No. 552—Carabayas, from Chillan.
No. 553—Chaguas, from Chillan.

ESCUELA AGRICOLA. Ancud.

POTATOES.

No. 554—Villaroela.
No. 555—Bastonesa.
No. 556—Pana.
No. 557—Butter.
No. 558—Coraila.
No. 559—White Bolera.
No. 560—Black French.
No. 561—Ñanco.
No. 562—Carichagua.
No. 563—French.

No. 564—Red American.
No. 565—Notra.
No. 566—Quila.
No. 567—Camote.
No. 568—Spotted Violet.
No. 569—Early Chilean.
No. 570—Richter's Imperator (third generation in Chile).
No. 571—Runkopf.

CLASS 4.—By-Products Used for Animal Foods.

HÖRMANN & CO. Valparaiso.
No. 572—Cocoanut residue cakes.

ZANZI & CO. La Serena.
No. 573—Olives residue cakes.

APPLEGREN & CO. Linderos.
No. 574—Bran of wheat.

VELASCO, Benjamin. Santiago.
No. 575—Bran of wheat.

CLASS 5.—Agricultural Products not Classified.

SANCHEZ RUIZ, F. Bucalemu–Curimon.
No. 576—Tobacco-wrapper.
No. 577—Tobacco-filler.

PUGA BORNE, F. Chillan.
No. 578—Native tobacco.

ORTUZAR DE VALDES, A. (Señora). Cunaco–Colchagua.
No. 579—Native tobacco.

CHARME, E. Requinoa–O'Higgins.
No. 580—Native tobacco.

GROUP 2—FIBRES AND FERTILIZERS.

CLASS 6.—Fibres of Vegetable Origin.

CALDERON, E. Tongoy.
No. 581—Cotton.

COMMISSION OF CHILE. Santiago.

COTTON.

No. 582—Special white, from Copiapó.
No. 583—Silky, from Copiapó.
No. 584—Common white, from Copiapó.
No. 585—Dark Vicuña, from Copiapó.
No. 586—Light Vicuña, from Copiapó.

COMMISSION OF CHILE. Santiago.
No. 587—Hemp, from Aconcagua.

CHARME, E. Requinoa-O'Higgins.
No. 588—Hemp.

CLASS 7—Fibres of Animal Origin.

SILVA, Alejandro. Santiago.
No. 589—Spun silk.
No. 590—Cocoons.

QUINTA NORMAL DE AGRICULTURA. Santiago. A collection of fleeces, as follows:

No. 591—Common merino, weight, 10 lbs.
No. 592—Common merino ewe, weight, 6 lbs.
No. 593—Imported merino ram, weight, 16¼ lbs.
No. 594—Imported merino ewe, weight, 12½ lbs.
No. 595—Imported merino ram, weight, 15 lbs.
No. 596—Southern ram, weight, 8¾ lbs.
No. 597—Southern ewe, weight, 7¾ lbs.
No. 598—Oxfordshire-down ram, weight, 12 lbs.
No. 599—Oxfordshire-down ewe, weight, 8 lbs.
No. 600—Hampshire-down ram, weight, 7½ lbs.
No. 601—Hampshire-down ewe, weight, 9½ lbs.
No. 602—Lincoln ram, weight, 12½ lbs.
No. 603—Lincoln ewe, weight, 10½ lbs.
No. 604—Lina ram.
No. 605—Lina ewe.

MOLLER, A. Angol.
No. 606—Lincoln ewe fleece, weight 16⅓ lbs. (7 months old).

COMPAÑIA EXPLOTADORA DE TIERRA DEL FUEGO. Valparaiso.
No. 607—Fleeces.

CLASS 8—Non-Edible Products of Animal Origin.

BARRIENTOS, E. Ancud.

No. 608—Bees-wax.
No. 609—Bees-wax (stamped).

WESTERMEIER, J. La Serena.

No. 610—Bees-wax (bleached).

ESCUELA AGRICOLA. Chillan.

No. 611—Bees-wax.

HESS, Hermanos. Osorno.

No. 612—Bone-dust (first quality).
No. 613—Bone-dust (ordinary quality).

COMPAÑIA DE REFINERIA DE AZUCAR. Viña del Mar.

No. 614—Charcoal.
No. 615—Refinery charcoal made on the premises.
No. 616—Used refinery charcoal (sold as a fertilizer).

CLASS 9—Natural Fertilizers, Crude and Compounded.

COMITE NACIONAL DE PROPAGANDA DE ABONOS. Santiago.

No. 617—Shell-dust, from La Mocha.
No. 618—Shell-dust, from San Antonio.
No. 619—Azotic bone dust, from Santiago.
No. 620—Bone-dust, from Angol.
No. 621—Phosphated bone dust, from Santiago.
No. 622—Ashes of burnt woods.
No. 623—Azotic and phosphoric manure, from Concepción.
No. 624—Azotic guano.
No. 625—Azotic manure, from Concepción.
No. 626—Sulphurized phosphoric manure, from Concepción.
No. 627—Ashes from cremating furnaces.
No. 628—Ashes, from Angol.
No. 629—Ashes of vines, from Santiago.
No. 630—Ashes of vines and saw-dust, from Santiago.
No. 631—Nitrate of soda.
No. 632—Nitrate of soda.
No. 633—Nitrate of soda.
No. 634—Gypsum, from Antofagasta.
No. 635—Gypsum, from Angol.
No. 636—Saw-dust, from Santiago.
No. 637—Azotic guano.
No. 638—Gypsum, from Antofagasta.
No. 639—Phosphoric guano.

No. 640—Bone-dust.
No. 641—Phosphoric guano.
No. 642—Phosphoric guano.
No. 643—Ashes used for manuring purposes.
No. 644—Compound manures.
No. 645—Phosphoric guano.
No. 646—Phosphoric guano.
No. 647—Phosphoric guano.
No. 648—Gypsum, from Lampa.
No. 649—Ground limestone.
No. 646—Husks of pressed grapes.

COMMISSION OF CHILE. Santiago.

No. 651—Phosphated guano of marine animals (Mejillones).
No. 652—Phosphated guano of marine birds (Mejillones).
No. 653—Phosphated guano of marine animals (Mejillones).
No. 654—Phosphated guano of marine 32 per cent, ph. 205 (Mejillones).
No. 655—Phosphated guano of marine 36 per cent, ph. 505 (Mejillones).
No. 656—Phosphated guano of marine 36 per cent, ph. 505 (Mejillones).

GROUP 3—DAIRY METHODS AND PRODUCTS.

CLASS 11—Dairy Products.

TAGLE, V. Manuel. Santiago.

No. 657—Condensed milk.

BONARDI, José. Serena.

No. 658—Condensed milk.

Not Classified.

COMITE NACIONAL DE PROPAGANDA DE ABONOS. Santiago. Collection of analyzed irrigating water, as follows:

No. 659—From River Claro, Talca.
No. 660—From River Putagan, Linares.
No. 661—From River Bio-bio, Concepción.
No. 662—From River Longarí, Parral.
No. 663—From River Chillan, Chillan.
No. 664—From River Ñuble, Chillan.
No. 665—From River Tinguiririca, San Fernando.
No. 666—From River Mapocho, Santiago.
No. 667—From River Lircai, Talca.
No. 668—From River Putaendo, San Antonio de Putaendo.
No. 669—From River Teno, Curicó.

No. 670—From River Clarillo, Concepción.
No. 671—From River Aconcagua, Calera.
No. 672—From River Aconcagua, Los Andes.
No. 673—From River Lontué, Curicó.
No. 674—From River Cachapoal, Rancagua.
No. 675—From River Guaiguillo, Curicó.
No. 676—From Stream Pocuro, Los Andes.
No. 677—From Stream Limache, Limache.
No. 678—From Stream Melon, Quillota.
No. 679—From Stream Quilqué, Quilqué.
No. 680—From Stream Ancoa, Linares.
No. 681—From Stream Pangue, Panguileno.
No. 682—From Stream Colina, Colina.
No. 683—From Stream Chimbarongo, San Fernando.
No. 684—From Galan Canal, Santiago.
No. 685—From Carmen Canal, Batuco.
No. 686—From San Carlos Canal, Santiago.
No. 687—From San Miguel Canal, Santiago.
No. 688—From Ovalle Canal, Calera.
No. 689—From Waddington Canal, Calera.
No. 690—From Poblacion Canal, Santiago.

COMMISSION OF CHILE. Santiago.

No. 691—Water of the River Claro, Elqui.
No. 692—Water of the River Turbio, Elqui.

GROUP 4—LITERATURE AND STATISTICS.

CLASS 12—Agricultural Systems, Management and Processes.

LE FEUVRE, René. Santiago.

No. 693—"La Quinta Normal de Agricultura" (Description, in French, of a model farm, thus called, and situated in Santiago), 1889.
No. 694—"Breve reseña sobre la Quinta Normal de Agricultura de Santiago" (Short sketch on the Quinta Normal de Agricultura of Santiago), 1901.

PRADO L., Uldaricio. Chillan.

No. 695—"Cartilla sobre la aplicación de los abonos en Chile" (Handbook for the application of fertilizers in Chile), 1898.

SOCIEDAD NACIONAL DE AGRICULTURA. Santiago.

No. 696—"Breves indicaciones respecto de Guanos fosfatados Chilenos y su aplicación" (Short sketches on the phosphated guanos of Chile and their use), 1897.

No. 697—"Manual del hacendado Chileno" (Hand-book for Chile Farmers), by José Manuel Balmaceda, 1875.

No. 698—"Abonos que pueden aplicarse en Chile—El Yeso" (Fertilizers useful in Chile—Gypsum), by René F. Le Feuvre y Arturo Dagnino, 1894.

INSTITUTO AGRICOLA. Santiago.

TEXT-BOOKS.

No. 699—"Descripción y manejo de las máquinas á vapor locomóviles" (Description and handling of steam engines).

No. 700—"Precios corrientes en Santiago de los materiales, obras de mano y construcciones en 1888" (Price of labor and building materials in Santiago), by Manuel H. Concha, 1889.

No. 701—"Nociones elementales y prácticas de trinogometria rectilinea" (Elementary and practical studies on Rectilineal Trigonometry), by Manuel H. Concha, 1895.

No. 702—"Elementos de contabilidad agrícola" (Agricultural book-keeping), by Manuel H. Concha, 1896.

No. 703—"Tratado de meteorolojia y climatolojia agrícola" (Agricultural meteorology and climatology), by Guillermo Aldana P., 1899.

No. 704—"Curso de agricultura teórica y práctica" (Treatise on theoretical and practical Agriculture), by F. Le Feuvre (two volumes), 1875-1877.

No. 705—"Compendio de agricultura jeneral" (Elementary treatise on Agriculture), from lessons by M. Le Feuvre and compiled by Manuel Rojas L., 1897.

No. 706—"Aplicación práctica de los abonos en Chile" (Use of fertilizers in Chile), by Cárlos Henriquez A., 1898.

No. 707—"Curso de Injeniería Rural. Nivelación" (Treatise on Agricultural Engineering; Levelling), by Manuel H. Concha, 1896.

No. 708—"Mecánica Agrícola" (Agricultural Mechanics), by Manuel H. Concha, 1896.

MARTÍNEZ ORTIZ, Ricardo. Santiago.

No. 709—"Almanaque cultural agrícola enciclopédico" (Encyclopedic agricultural calendar), 1897.

ESTACIÓN DE PATOLOJÍA VEJETAL. Santiago.

No. 710—"La Estación de Patalojía Vejetal de Chile en Santiago" (The Botanical pathology station of Chile, located at Santiago), 1899.

SOCIEDAD NACIONAL DE AGRICULTURA. Santiago.

No. 711—"Boletín de la Sociedad destinado al fomento de los intereses agrícolas del país; Publicación semanal" (A weekly bulletin published by the Society for the Promotion of Agriculture in Chile), thirty-two volumes, 1869–1900.

SOCIEDAD AGRÍCOLA DE LA FRONTERA. Angol.

No. 712—"Estatutos de la Sociedad Agrícola de la Frontera" (Rules and Regulations of the Agricultural Society of the South), 1899.

No. 713—"Memoria que presenta el Directorio á la Junta Jeneral en sesión de 1° de mayo de 1900" (Report submitted to the general meeting on May 1st, 1900, by the Board of Directors).

COMMISSION OF CHILE. Santiago.

No. 714—Reglamento para la Escuela Práctica de Agricultura de Chillan" (Rules and Regulations of the Agricultural Training School of Chillan), 1899.

No. 715—"Informe sobre el estudio minero y agrícola de la región comprendida entre el paralelo 23 y la laguna de Ascotan" (Mineral and agricultural sketches on the region between twenty-three degrees Southern latitude and the lake of Ascotan), by Samuel Valdes, 1886.

DIVISION II.

AGRICULTURAL MACHINERY AND APPLIANCES.

GROUP 5—IMPLEMENTS AND MACHINERY FOR CULTIVATING THE SOIL.

CLASS 14—Implements, Machines and Tools for Breaking the Soil.

COMMISSION OF CHILE. Santiago.

No. 716—Cultivator, made by Raab Hermanos, from Santiago.

GROUP 6—IMPLEMENTS, MACHINES AND APPLIANCES FOR HARVESTING AND PRESERVING CROPS.

CLASS 17—Implements, Machines and Tools for Harvesting Crops.

COMMISSION OF CHILE. Santiago.

No. 717—Wood spade.

GROUP 7—IMPLEMENTS, MACHINES AND APPLIANCES FOR AGRICULTURAL AND RURAL USE.

CLASS 21—Fences and Fence Machinery and Appliances, Gates and Posts.

HURTADO, Carlos. Valparaiso.

No. 718—Wire fences.

CLASS 23—Implements, Machines and Appliances for Irrigation and Drainage.

PEÑA, José del C. Fundicion Santiago. Santiago.

No. 719—Centrifugal pump.

GROUP 8—MISCELLANEOUS FARM MACHINERY, APPLIANCES, APPARATUS AND FIXTURES.

CLASS 32—Implements, Machinery, Tools and Appliances for Farm Use not otherwise specified.

ARAVENA, Jovino. Santiago.

No. 720—Churn.

DIVISION III.

LIVE STOCK.

GROUP 11—INSECTS.

CLASS 40—Insects and Insect Products.

SILVA, Alejandro. Santiago.
(See Class 7, Nos. 589 and 590.)

BARRIENTOS, E. Ancud.
(See Class 8, Nos. 608 and 609.)

WESTERMEIER, J. La Serena.
(See Class 8, No. 610.)

ESCUELA AGRICOLA DE CHILLAN.
(See Class 8, No. 611.)

COMMISSION OF CHILE. Santiago.
No. 721—Collection of 1,800 insects, in 14 boxes. Collected and classified by Señor Edwin C. Reed, Rancagua.

CLASS 41—Wild Animals and Specimens of Taxidermy.

FONCK & CO., Carlos. Valparaiso.
No. 722—Two goats from Juan Fernandez Island.

COMMISSION OF CHILE. Santiago. Specimens ready for taxidermy:

BIRDS.

No. 723—Catita ♂ *(Micrositta re ferrugirens)*. (86.)
No. 724—Catita ♀ *(Micrositta re ferrugirens)*. (87.)
No. 725—Tórtola ♀ *(Zenaida auriculata)*. (89.)
No. 726—Tórtola ♂ *(Zenaida auriculata)*. (90.)
No. 727—*Phrigylus fruticeti*, Kittl. *(Chrorospiza crythrorrhyncha*, Gay*)*. (91.)
No. 728—Diuca ♂ *(Fringila diuca)*.
No. 729—Jilguero de la Cordillera *(Chrysomitris uropygialis)*. (94.)
No. 730—Zorzal ♂ *(Turdus magellanicus*, King*)*. (97.)

No. 731—Zorzal ♀ *(Turdus magellanicus*, King*)*. (98.)
No. 732—Chirigüe *(Sycalis arvensis*, Kittl.*)*. (99.)
No. 733—Tenca ♀ *(Mimus thenca*, Mol.*)*. (100.)
No. 734—Tenca ♂ *(Mimus thenca*, Mol.*)*. (101.)
No. 735—Torcaza ♂ *(Columba auracana*, Leiht*)*. (102).
No. 736—Perdiz ♂ *(Nothroprocta perdicaria*, Fras. *Nothura perdicaria)*. (103.)
No. 737—Perdiz ♀ *(Nothroprocta perdicaria*, Fras. *Nothura perdicaria)*. (104.)
No. 738—Chincol ♀ *(Zonotrichia pileata*, Bon. *Fringila matutina*, Leiht*)*. (107.)
No. 739—Chincol ♂ *(Zonotrichia pileata*, Bon. *Fringila matutina*, Leiht*)*. (108.)
No. 740—Cojon *(Tirrocurus Orbignyanus*, Geoffr., Less*)*. (109.)
No. 741—Jilguero de la Cordillera ♂ *(Psondechloris auriventris*, Ph. and Lamb*)*. (110.)
No. 742—Jilguero de la Cordillera ♀ *(Psondechloris auriventris*, Ph. and Lamb*)*. (111.)
No. 743—Jilguero ♀ *(Crysomitris barbata*, Mol.*)*. (113.)
No. 744—Jilguero ♂ *(Chrysomitris barbata*, Mol.*)*. (114.)
No. 745—Tortolita cuyana ♂ *(Columba pini azara)*. (116.)
No. 746—Tortolita cuyana ♀ *(Columba pini azara)*. (117.)
No. 747—Choroi ♂ *(Henicoynathus leptorrhynchus*, King*)*. (133.)
No. 748—Cóndor, ♀ adult *(Sarcoramplus griphus)*. (145B.)
No. 749—Cóndor, ♂ adult *(Sarcoramplus griphus)*. (146B).
No. 750—Cóndor ♀ *(Sarcoramplus griphus)*. (147B.)
No. 751—Cóndor, ♂ young *(Sarcoramplus griphus)*. (148B.)

NOTES: See Class 172.
Numbers in parentheses are those used by the collector.
Classification was made by Señor Federico Phillippi, Director of the National Museum of Santiago.

GROUP 13—LITERATURE AND STATISTICS.

CLASS 42—Literature, Statistics, History and Regulations Pertaining to Live Stock.

INSTITUTO AGRÍCOLA. Santiago.

No. 752—"El carbunclo" (The carbuncle), by Julio Besnard, 1891.
No. 753—"Guia del cultivador de gusanos de seda" (Guide for the cultivation of silk-worms), translated from French by L. E. Brieba 1867.
No. 754—"Tratado completo de la crianza y engorda de las aves domésticas y conejos" (Breeding of domestic birds and rabbits), translated from W. Trotter's English treatise, 1860.
No. 755—"Zootecnia—Tratado del exterior de los animales domésticos" (Zootheeny—Treatise of the outside phase of domestic animals), by Julio Besnard, 1878.
No. 756—"Zoothecnia Jeneral" (General Zoothecny), by Julio Besnard, 1884.

DIVISION IV.

FOODS AND THEIR ACCESSORIES.

GROUP 14—COFFEES, TEAS, SPICES AND ESSENCES.

CLASS 43—Coffees, Teas, Cocoas, Kola, Chocolates and their Substitutes.

LUIS, GIOSIA, HERMANOS & CO. Santiago.

No. 757—Chocolate santé.
No. 758—Chocolate vanilla.
No. 759—Chocolate vanilla superior.
No. 760—Chocolate vanilla extra.
No. 761—Chocolate extra fine.
No. 762—Chocolate for ladies (boxes of 1 lb.)
No. 763—Chocolate for ladies (boxes of ½ lb.)
No. 764—Cocoa (tin cans of 1 lb.).
No. 765—Cocoa (tin cans of half pound).

CLASS 44—Spices, Aromatics, Sauces, Chutney, Curries, Mustard and Pickles, Olives and other Relishes, Table Salts, Vinegars and other Condiments, Herbs, Hops, etc.

RUBIO, Nicolas. Rancagua.

No. 766--Tomato sauce.

GRAY & SINCLAIR. Quilpué.

No. 767—English sauce.
No. 768—Mixed pickles.
No. 769—Piccalilli.

COMMISSION OF CHILE. Santiago.

No. 770—Anise-seed.
No. 771—Cummins (commercial sample).

LANZ, E. Maipo.

No. 772—Anise-seed.

ESCUELA AGRICOLA. Chillan.

No. 773—Chile red peppers, Orocote.
No. 774—Chile red peppers, small.
No. 775—Chile red peppers, "Ningüe."
No. 776—Hops.

ZANZI & CO. La Serena.

No. 777—Olive oil, "Sublime."

Mo. 778—Olive oil, "Virjen."

GROUP 15—SUGARS.

CLASS 46—Beet Sugar.

FABRICA DE AZUCAR DEL MEMBRILLO. Parral.

No. 779—Beet sugar, first product (washed).

No. 780—Beet sugar, first product (crude).

No. 781—Beet sugar, second product (washed).

No. 782—Beet sugar, second product (crude).

No. 783—Beet sugar, third product.

No. 784—Beet sugar, fourth product.

COMPAÑIA DE REFINERIA DE AZUCAR. Viña del Mar.

No. 785—American cube sugar.

No. 786—Loaf sugar (F. T. R.).

No. 787—Loaf sugar (R. A. V.).

No. 788—Block sugar (F. T. R.).

No. 789—Block sugar (R. A. V.).

No. 790—Sugar tablets (F. T. R.).

No. 791—Sugar tablets (R. A. V.).

No. 792—Powdered sugar.

No. 793—Third product.

No. 794—Fourth product.

CLASS 47—Glucose, Grape, Palm, Milk, Fruit Sugars, Syrups and Molasses.

COMPAÑIA DE REFINERIA DE AZUCAR. Viña del Mar.

No. 795—First syrup.

No. 796—Second syrup.

No. 797—Third syrup.

No. 798—Final molasses.

ASCANIO BASCUÑAN, S. M. Ocoa.

No. 799—Palm syrup, in cans.

No. 800—Palm syrup with nuts, in cans.

COMMISSION OF CHILE. Santiago.

No. 801—Palm syrup, in cans (Calixto Ovalle).

No. 802—Palm syrup, in cans (Juan Francisco Mujica).

RODRIGUEZ, Z. Quillota.
No. 803—Honey.

VARGAS G., Victor. Santiago.
No. 804—Honey.

ESCUELA AGRICOLA. Chillan.
No. 805—Honey.

ESCUELA AGRICOLA. Ancud.
No. 806—Collection of honeys.

FORESTIER, Carlos (Director of the Apiary of the Quinta Normal de Agricultura). Santiago.
No. 807—Collection of honeys.

ESCUELA AGRICOLA. Concepción.
No. 808—Honey (in the comb).

COMMISSION OF CHILE. Santiago.
No. 809—Honey (prepared by the Indians), Ancud.
No. 810—Honey of San Luis de Atico (Talca).

HESS, Hermanos. Osorno.
No. 811—Honey.

BUNSTER, Manuel. Angol.
No. 812—Honey (ten samples gathered every fifteen days, beginning November, 1899).
No. 813—White honey (crop of 1901).
No. 814—White honey, in comb (crop of 1901).

ORTUZAR DE VALDES, A. (Señora). Cunaco-Colchagua.
No. 815—Honey.

VALDES V., Ismael. Cunaco-Colchagua.
No. 816—Honey.

WESTERMEIER, J. La Serena.
No. 817—Honey.

GROUP 16—PRESERVED FRUITS.

CLASS 49—Preserves, Jams, Jellies and Marmalades.

RUBIO, Nicolas. Rancagua.

CANNED FRUITS AND VEGETABLES.

No. 818—Quinces.
No. 819—Strawberries.
No. 820—Cherries.

No. 821—White peaches.
No. 822—Zaragosa peaches.
No. 823—Asparagus, first quality.
No. 824—Asparagus, second quality.
No. 825—Artichokes.
No. 826—Green beans.
No. 827—Green sliced beans.
No. 828—Green peas.
No. 829—Tomatoes, natural state.

MAKENTHUN, NEVES & CO. Los Andes.

CANNED FRUITS AND VEGETABLES.

No. 830—Peaches.
No. 831—Strawberries.
No. 832—Small peaches, peeled.
No. 833—White peaches.
No. 834—Small peaches.
No. 835—Apricots.
No. 836—Cherries.
No. 837—White grapes.
No. 838—Tomatoes.
No. 839—Petit-pois.

JAMS.

No. 840—Apple.
No. 841—Strawberry.
No. 842—Zaragosa peach.
No. 843—Pear.
No. 844—Cherry.
No. 845—Plum.
No. 846—Melon.

COMMISSION OF CHILE. Santiago. Products of the firm: Osvaldo Perez S.

CANNED FRUITS AND VEGETABLES.

No. 847—Apricots.
No. 848—Cherries.
No. 849—Grapes.
No. 850—Strawberries.
No. 851—Zaragosa peaches.
No. 852—White peaches.
No. 853—San José peaches.
No. 854—Quinces.
No. 855—Asparagus.
No. 856—Peas.

GRAY & SINCLAIR. Quilpué.

JAMS AND JELLY.

No. 857—Strawberry.
No. 858—Apricot.
No. 859—Apple jelly.
No. 860—Peach.
No. 861—Orange marmalade.
No. 862—Pineapple.
No. 863—Gooseberry.
No. 864—Rasp flavored jelly.
No. 865—Blackberry.
No. 866—Plum.
No. 867—Green orange.

RENJIFO, Matilde. Santiago.

JAMS.

No. 868—Alcallota.
No. 869—Peach.
No. 870—Strawberry.
No. 871—Cherry.
No. 872—Plum.
No. 873—Small orange.
No. 874—Tomato.
No. 875—Fig.
No. 876—Small lemon.
No. 877—Watermelon.
No. 878—Small peach.
No. 879—Papaya.
No. 880—Apricot.
No. 881—Quince.

CLASS 51—Fruit Juices.

RENJIFO, Matilde (Señorita). Santiago.
No. 882—Quince syrup.
No. 883—Grape syrup.
No. 884—Cherry syrup.

VENTURA, Hermanos. Santiago.
No. 885—Cherry syrup.
No. 886—Tamarind syrup.
No. 887—Strawberry syrup.

MATHEI, Eduardo. Osorno.
No. 888—Cherry syrup.

GROUP 17—NUTS, MUSHROOMS, DRIED FRUITS AND VEGETABLES.

CLASS 54—Dried, Evaporated and Prepared Fruits.

COMMISSION OF CHILE. Santiago.
No. 889—Dried cherries from Chillan.
No. 890—Raisins from Huasco.

ASSMAN, J., Quinta "Falesia." Quillota.
No. 891—Dried apples and pears.

VARELA, G. Elqui.
No. 892—Dried figs.

PERALTA, F. A. Paihuano-Elqui.
No. 893—Raisins (1900 crop).
No. 894—Dried peaches (1901 crop).
No. 895—Dried peaches, stoneless (1901 crop).

IZQUIERDO, Salvador. Santa Ines-Nos.
No. 896—Dried cherries.
No. 897—Dried peaches.

NECKELMANN, Hermanos. Valparaiso.
No. 898—Dried peaches.
No. 899—Raisins.

PINTO, J. Elqui.
No. 900—Dried peaches.

ALVARES, P. Paihuano-Elqui.
No. 901—Dried peaches, stoneless.
No. 902—Raisins.

FIGUEROA, Hermanos. Vallenar.
No. 903—Dried figs.

AGUIRRE, Ruperto. Santiago.
No. 904—Dried peaches, stoneless.

CLASS 55—Dried, Evaporated and Prepared Vegetables.

COMMISSION OF CHILE. Santiago.
No. 905—Garlic.
No. 906—Squash.

GROUP 18—FOOD PREPARED FROM CEREALS.

CLASS 56—Prepared Cereals.

COMMISSION OF CHILE. Santiago.

No. 907—Boiled shelled wheat.
No. 908—Cracked wheat.

ROJAS MAGALLANES, V. Trapiche–Ovalle.

No. 909—Roasted wheat meal.
No. 910—Roasted pea meal.

MAC KAY, Alexander. Talca.

CRACKERS.

No. 911—Ginger finger.
No. 912—Rings, I and II.
No. 913—Cinnamon.
No. 914—Toast.
No. 915—Lunch.
No. 916—Ginger nut.
No. 917—Cocoanut.
No. 918—Madeira.
No. 919—Marie.
No. 920—Jersey.
No. 921—Assorted, II and III.
No. 922—Arrowroot.
No. 923—Vanilla.
No. 924—Museum.
No. 925—Patience.
No. 926—Rice.
No. 927—Colonial.
No. 928—Lemon finger.
No. 929—Lemon rings.
No. 930—Albernithy.
No. 931—Almond ring.
No. 932—Lemon.
No. 933—Rich mixed.
No. 934—English milk.
No. 935—Water.
No. 936—Savoy.
No. 937—Leaflet.
No. 938—Maizena.
No. 939—Wine.
No. 940—Tea.
No. 941—Wheat meal.

COMMISSION OF CHILE. Santiago.

FLOURS.

No. 942—First-class flour (Carlos Hoffman, Rengo).
No. 943—First-class flour (M. E. Morel, Calera).

ORTUZAR DE VALDES, Señora. Cunaco-Colchagua.
No. 944—First-class flour.

BUNSTER, E. S. Mulchen.
No. 945. First-class flour.

COTAPOS, E. P. Santiago (San Pedro Mill).
No. 946—First-class flour.

APPLEGREN & CO. Linderos (Lanz Mill).
No. 947—First-class flour.

SALAS, José Rafael. Graneros (La Compañia Mill).
No. 948—First-class flour.

MENGE, Hermanos. Osorno (Victoria Mill).
No. 949—First-class flour.

VELASCO, Benjamin. Santiago (Recoleta Dominica Mill).
No. 950—First-class flour.
No. 951—Second-class flour.
No. 952—Third-class flour.

KOKE, Federico. Rancagua.
No. 953—First-class flour.

HUGO, Walterio. Santiago (Americano Mill).
No. 954—First-class flour.

MEISSNER, A. H. Rancagua (San Pedro Mill).
No. 955—First-class flour.

FIRTH & SPROAT. Linares (Del Almendro Mill).
No. 956—First-class flour.

LAVIN, Arsenio. Traiguen.
No. 957—First-class flour.

LÉLIVA, Luis. Santiago (La Campana).
No. 958—First-class flour.

BUNSTER, Manuel. Angol.
No. 959—First-class flour.

GROB, T. Union.
No. 960—First-class flour.

MILNE & ASENJO. Union.
No. 961—First class flour.

OUVRARD, Augusto. San Felipe (La Merced Mill).
No. 962—Hard wheat flour.

DAUELSBERG, Juan. Santiago (La Estampa Mill).
No. 963—First-class flour.
No. 964—Hard wheat flour.
No. 965—Grit.

CLASS 57—Indian Corn as Table Food.

ROJAS MAGALLANES, V. Trapiche–Ovalle.
No. 966—Roasted corn meal.
No. 967—Boiled corn meal.

COMMISSION OF CHILE. Santiago.
No. 968—Corn, boiled and ground.
No. 969—Boiled green corn.
No. 970—Boiled green corn.

RUBIO, Nicolas. Rancagua.
No. 971—Green corn, sliced.
No. 972—Green corn, cut.

CLASS 58—Macaroni and other Preparations of Paste.

SILVA LASTARRIA, Alejandro. El Mercurio. Santiago.
No. 973—Collection of 100 different varieties of vermicelli, spaghetti and macaroni.

ZANETTA, Hermanos. La Fama. Valparaiso.
No. 974—Collection of 20 varieties of vermicelli, macaroni, spaghetti, etc.

MONTEFUSCO & RONCATI. La Nacional. Concepcion.
No. 975—Collection of 80 varieties of macaroni, vermicelli, etc.

ANTONIO ROVEGNO. La Africana. Santiago.
No. 976—Collection of 42 varieties of vermicelli, macaroni, etc.

CLASS 59—Starch Preparations.

DUCÓ, A. San Felipe.
No. 977—Wheat starch.

COMMISSION OF CHILE. Santiago.
No. 978—Wheat starch.

GROUP 19.

BEVERAGES FOR HOUSEHOLD AND OTHER USES.

CLASS 61—Waters, Natural or Artificial, for Table and Other Drinking Purposes, or Use in the Arts.

SCHAEFFER, Guillermo. El Toro spring. La Serena.
No. 979—Mineral water.

PAULSEN, Ewe. Quinamávida spring. Parral.
No. 980—Mineral water.

WIKER & PAGUEGUY. Thermal Baths of Chillan.
No. 981—Mineral water (sulphurous and potash).

CLASS 62—Aerated Waters.

COMMISSION OF CHILE. Santiago (Griffiths & Co.).
No. 982—Ginger ale.
No. 983—Club soda.
No. 984—Raspberry.
No. 985—Champagne kola.
No. 986—Sarsaparilla.
No. 987—Pineapple.
No. 988—Lemonade.

FRUGONE, Pedro. Valparaiso.
No. 989—Ginger ale.
No. 990—Pineapple.
No. 991—Seltzer water.
No. 992—Kola champagne.
No. 993—Lemonade.
No. 994—Sarsaparilla.

CLASS 63—Beverages, Non-Alcoholic.

RENJIFO, Matilde (Señorita). Santiago.
No. 995—Syrup of almonds.

CLASS 64—Alcoholic Beverages, Blended, Mixed; Cordials, Liquors, Bitters.

DELANO, Eduardo. Coelemu. (El Majuelo.)
No. 996—Apple cider.

HEIN, T. Osorno.
No. 997—Apple cider.

BARRIENTOS, M. Osorno.
No. 998—Apple cider.

BARRIENTOS, Arturo. Osorno.

No. 999—Apple cider.

VENTURA, Hermanos. Santiago.

No. 1000—Bitters.
No. 1001—Chartreuse.
No. 1002—Peppermint.
No. 1003—Aperitive.
No. 1004—Brandy.
No. 1005—Pineapple liquor.
No. 1006—Cacao creme.
No. 1007—Fernet.
No. 1008—Gin.
No. 1009—Maraschino.
No. 1010—Pousse café.
No. 1011—Benedictine, similar.

ROSSARD, Hector. Santiago.

No. 1012—Walnut liquor.
No. 1013—Riquette.
No. 1014—Peppermint, white.
No. 1015—Peppermint, green.
No. 1016—Chartreuse, similar.
No. 1017—Somelyer.
No. 1018—Pousse café.
No. 1019—Anisette.
No. 1020 - Curaçoa.
No. 1021—Triple dry curaçoa.
No. 1022—Bitters.
No. 1023—Cocao creme.
No. 1024—Rose creme.
No. 1025—Vanilla creme.
No. 1026—Orange creme.
No. 1027—Dantzic.

ALEXANDRE, P. S. Santiago.

No. 1028—Kümmel.
No. 1029—Kakas (American).
No. 1030—Krunelle creme.
No. 1031—Curaçoa.
No. 1032—Gentiane of the Alps.
No. 1033—Chartreuse.
No. 1034—Stomachal sweet liquor.
No. 1035—Guinolet.
No. 1036—Vermouth.
No. 1037—Bitters.

STORCK, José. Valdivia.
No. 1038—Germania bitters.
No. 1039—Cherry liquor.
No. 1040—Chartreuse.
No. 1041—Orange liquor.

FRUGONI, Pedro. Valparaiso.
No. 1042—Cherry liquor.

CALBERT, G. Quillota.
No. 1043—Papaya liquor.

REMBADI, Francisco. Valparaiso.
No. 1044—Vermouth, South American.

CLASS 65—Spirits for Use in Arts.

COMPAÑIA DE REFINERIA DE AZUCAR. Viña del Mar.
No. 1045—Sugar alcohol.

ORTUZAR DE VALDES (Señora). Cunaco-Colchagua.
No. 1046—Grain spirits.

SCHMIDT & CO., Carlos. Osorno.
No. 1047—Grain spirits.

LÉLIVA, Luis. San Fernando.
No. 1048—Alcohol.
No. 1049—Grain spirits.

STORCK, José. Valdivia.
No. 1050—Alcohol.

CLASS 66—Malt Beverages, Beers, Ales, Porters and Special Preparations Containing Hops and Malt.

ANWANDTER, Hermanos. Valdivia.
No. 1051—Märzen beer (quart bottles).
No. 1052—Lager beer (pint bottles).
No. 1053—Lager beer (quart bottles).
No. 1054—Pilsener (pint bottles).
No. 1055—Pilsener (quart bottles).
No. 1056—Malt (pint bottles).

COUSIÑO, Carlos. Santiago.
No. 1057—Erlanger beer.
No. 1058—Pilsener beer.
No. 1059—Lager beer.
No. 1060—White malt extract.
No. 1061—Dark malt extract.
No. 1062—Materials used in brewing.

COMMISSION OF CHILE. Santiago. Products of the Brewery "Fabrica Nacional de Cerveza," Valparaiso.

No. 1063—Pilsener beer.
No. 1064—Malt extract (white), pint bottles.
No. 1065—Malt extract (dark), pint bottles.
No. 1066—Lager beer.
No. 1067—Baviera beer.

ABBOT, Ricardo. La Serena.

No. 1068—Lager beer.
No. 1069—Lager black (stout).
No. 1070—Erlanger Baviera.
No. 1071—Malt extract.

SIEBERT, Santiago. Osorno.

No. 1072—Pilsener beer.
No. 1073—Lager beer.

SCHAUCH & GEISSE. Osorno.

No. 1074—Pilsener beer.
No. 1075—Lager beer.

GROUP 20—PRESERVED AND PREPARED FOODS.

Class 67—Preserved Meats.

COMMISSION OF CHILE. Santiago.

No. 1076—Dried shredded meat.
No. 1077—Dried meat.

HOFFMAN & FUCHSLOCHER. Valdivia.

No. 1078—Dried meat.

NARETTO, Domingo. Rengo.

No. 1079—Hams.
No. 1080—Mortadella.

PRIESSING, E. Osorno.

No. 1081—Hams.

HESS, Hermanos. Osorno.

No. 1082—Dried meat.
No. 1083—Sausage.
No. 1084—Morcilla.

GARCIA, Agustin. Calbuco.

No. 1085—Chicken soup, canned.
No. 1086—Stewed chicken, canned.
No. 1087—Cows feet with peas, canned.

CLASS 68—Preserved Fish, Preserved Turtles and Other Sea-Fish.

(See Class 180.)

CLASS 70—Food Packed in Tin, Glass or Paper not Specially Classified Elsewhere.

KLEIN, Luis and Emilio. Santiago.

No. 1088—Klein infant food.

NARETTO, Domingo. Rengo.

No. 1089—Lard.

COMPAÑA DE REFINERIA DE AZUCAR. Viña del Mar.

No. 1090—Bone grease.

GROUP 21—LITERATURE.

CLASS 73—Processes and Methods.

COMMISSION OF CHILE. Santiago.

No. 1091—"Informe referente á la industria de conservación de frutas secas en Europa y los Estados Unidos de América" (Report on the dried fruit industry of Europe and the United States of America), by A. Thompson Rei, 1899.

CLASS 74—Literature and Statistics.

INSTITUTO AGRÍCOLA. Santiago.

No. 1092—"Breves observaciones sobre la molinería Chilena" (Brief notes on the milling industry of Chile), by Manuel H. Concha, 1890.

DIVISION V.

HORTICULTURE, POMOLOGY, FLORICULTURE AND VITICULTURE.

POMOLOGY.

GROUP 22—FRUITS.

CLASS 75—Pomaceous Fruits.

COMMISSION OF CHILE. Santiago.
No. 1093—Collection of pears (20 varieties).
No. 1094—Collection of Apples (70 varieties).

CLASS 76—Stone Fruits.

MATTE, Benjamin. Guindos–Santiago.
No. 1095—Collection of plums (39 varieties).

COMMISSION OF CHILE. Santiago.
No. 1096—Collection of peaches (21 varieties).

CLASS 78—

COMMISSION OF CHILE. Santiago.
No. 1097—Olives from San Fernando.
No. 1098—Figs from Osorno.

CLASS 79—Small Fruits.

COMMISSION OF CHILE. Santiago.
No. 1099—Dried Maqui from San Fernando.

CLASS 80—Nuts, Almonds, Pecans, Chestnuts, etc.

SCHNEIDER, Teodoro. La Encina–San Fernando.
No. 1100—Walnuts (3 samples).
No. 1101—Chestnuts (3 samples).

COMMISSION OF CHILE. Santiago.
No. 1102—Native hazelnuts from Angol.
No. 1103—"Piñones" (cones from "Araucaria" tree) from Angol.

SALAS UNDURRAGA, E. Los Nogales–Quillota.
No. 1104—Walnuts.

ZANZI & CO. La Serena.
No. 1105—Peanuts.

BASCUÑAN, Ascanio S. M. Ocoa.
No. 1106—Palm nuts.

COMITE NACIONAL DE PROPAGANDA DE ABONOS.
No. 1107—Walnuts (1st zone).
No. 1108—Hazelnuts (1st zone).
No. 1109—Almonds, fine, bitter.
No. 1110—Almonds, fine, bitter.
No. 1111—Almonds, tall, bitter.
No. 1112—Almonds, fine, white.
No. 1113—Almonds, fine, tall.

PRIDA, F. de la. El Tambo–Pelequen.
No. 1114—Hazelnuts.

GROUP 25—LITERATURE.

CLASS 84—Literature, History and Statistics.

ESTACIÓN DE PATOLOJÍA VEJETAL. Santiago.
No. 1115—"Una enfermedad de las papas: *el Macrosporium Solani*" (A potato disease), by Gaston Lavergne, 1899.
No. 1116—"Una enfermedad de los papales y sandiales en las Provincias de Santiago y Coquimbo" (A potato and watermelon disease in the Provinces of Santiago and Coquimbo), by Gaston Lavergne, 1900.
No. 1117—"La Cúscuta-cabellos de ánjel-parásito de la remolacha azucarera" (The cuscuta-angel-hair-parasite of the sugar-beet root), by Gaston Lavergne, 1900.
No. 1118—"El pulgón lanífero de las manzanos" (The woolly aphis of the apple tree), by Gaston Lavergne, 1900.
No. 1119—"Principales enfermedades de las plantas cultivadas en Chile" (Principal diseases of cultivated plants in Chile), by Gaston Lavergne, 1900.
No. 1120—"La enfermedad de los limones de Coyanco" (Diseases of lemon trees of Coyanco), by Gaston Lavergne, 1901.

INSTITUTO AGRÍCOLA. Santiago.
No. 1121—"Cultivo de la alcachofa, apio, berenjena, callampa, coliflor, espárrago y rabanito" (Culture of the artichokes, celery, cucumbers, mushrooms, cauliflowers, asparagus and radishes), by Manuel Rojas L., 1896.

No. 1122—"Manual de Cultura Hortense" (Hand-book on Horticulture), translated from the works of F. Ródigas, 1860.

No. 1123—"Compendio de horticultura práctica" (Elemetary treatise on practical horticulture), by Ricardo Martínez Ortiz, 1889.

IZQUIERDO, Salvador. Santiago.

No. 1124—"La arboricultura frutal y su aplicación á la industria de las frutas secas en Chile" (The pomology and its application to the dry-fruit industry in Chile), 1898.

No. 1125—"Catalogo jeneral del criadero de árboles de Santa Ines–Nos" (General catalogue of the fruit-tree nursery of Santa Ines–Nos), 1899.

BUNSTER, Manuel V. Angol.

No. 1126—"Catalogo de árboles frutales del criadero de 'El Vergel'" (Catalogue of the fruit-tree nursery of "El Vergel"), 1899.

FRICK, Guillermo. Valdivia.

No. 1127—"Observaciones sobre el cultivo del trigo y memoria sobre los árboles y arbustos de la Provincia de Valdivia" (Observations on the culture of wheat and the trees and shrubs of the Province of Valdivia), 1899.

FLORICULTURE.

GROUP 43—APPLIANCES, METHODS, ETC.

Not Classified.

IZQUIERDO, Salvador. Santa Ines–Nos. Collection of grape trees:

No. 1128—Dry plum tree graft, 2 years old, on Prunus Mirobolana.
No. 1129—Cherry tree graft, 1 year old, on cherry tree.
No. 1130—Pear tree graft, 1 year old, on quince tree.
No. 1131—Peach tree graft, 1 year old, on wild peach.
No. 1132—Cherry tree graft, 1 year old, on Mericier.
No. 1133—Plum tree graft on Mirobolana plum.
No. 1134—Apricot tree graft, 2 years old, on Prunus Mirobolana.
No. 1135—Pear tree graft, 1 year old, on quince tree.
No. 1136—Pear tree graft, 2 years old, on regular pear tree.
No. 1137—Kaki tree of Japan graft, 8 months old, on Diospiros Virginiana.
No. 1138—Peach tree cultivated undergraft, 8 months old, on wild peach tree
No. 1139—Dry plum tree graft, 1 year old, on St. Julien.
No. 1140—Apple tree graft, 1 year old.
No. 1141—Kaki tree of Japan graft, 2 years old, on Diospirios Virginiana.
No. 1142—Apple tree graft, 2 years old, on wild apple tree.
No. 1143—Apricot tree graft, 1 year old, on Prunus Mirobolana.
No. 1144—Walnut tree graft, 4 years old, on Prunus Mirobolana.
No. 1145—Cherry tree undergraft, 3 years old, on Mericier.
No. 1146—Almond tree graft, 2 years old, on wild peach.

VITICULTURE.

GROUP 45—THE VINE.

CLASS 149—Grapes for Table.

QUINTA NORMAL DE AGRICULTURA. Santiago.
No. 1147—Collection of 10 varieties of grapes for table.

CLASS 150—Grapes for Wine Making.

QUINTA NORMAL DE AGRICULTURA. Santiago.
No. 1148—Collection of 41 varieties.

CLASS 151—Grapes for Drying.

QUINTA NORMAL DE AGRICULTURA. Santiago.
No. 1149—Two varieties.

GROUP 46—WINES AND BRANDIES.

CLASS 153—White Wines.

TOCORNAL, José. Viña Algarrobal. Santiago.
No. 1150—Corriente.

COUSIÑO, Arturo. Viña Macul. Santiago.
No. 1151—"Año 1886."
No. 1152—"Año 1890."
No. 1153—"Año 1896."

CORREA, A. Jose Gregorio. Viña San Pedro. Lontué.
No. 1154—Semillon.

UNDURRAGA, Francisco R. Viña San Vicente. Victoria.
No. 1155—Especial.
No. 1156—Corriente.

QUINTA NORMAL DE AGRICULTURA. Santiago.
No. 1157—Corriente.

OCHAGAVIA, Silvestre. Chacra Ochagavia. Santiago.
No. 1158—Corriente.

LARRAIN, Ladislao. Viña Providencia. Melipilla.
No. 1159—Semillon.

MARTINEZ, R. Lisandro. Viña Velenunque. Bulnes.
No. 1160—Corriente.

CONCHA, Emiliana S. de. Viña Concha y Toro. Santiago.
No. 1161—Corriente, 1894.
No. 1162—Corriente.

FERNANDEZ CONCHA, Domingo. Viña Santa Rita. Maipo.
No. 1163—Especial.
No. 1164—Reservado.
No. 1165—Corriente.

ERRAZURIZ, U. Rafael. Viña Panquehue. Los Andes.
No. 1166—Corriente.

NEBEL, Alejandro M. Viña Romelia. Freirina.
No. 1167—Corriente.

EASTMAN, Adolfo. Viña Urmeneta. Limache.
No. 1168—Corriente, 1893.
No. 1169—Corriente, 1895.

BROWN, Guillermo. Viña Escorial de Panquehue. Los Andes.
No. 1170—Corriente.

CERDA Y TALAVERA. Viña Santa Lucia. Lontué.
No. 1171—Blanco corriente.
No. 1171*a*—Sauterne.

MARAMBIO, Nicanor. Chacra Marambio. Santiago.
No. 1172—Corriente.

VELASCO, Vicente. Viña Trinidad. Limache.
No. 1173—Corriente.

HERBOSO, Francisco, E. Viña Mercedes. Quillota.
No. 1174—Corriente.

DÉLANO, Eduardo. Viña Majuelo. Coelemu.
No. 1175—Pinot.
No. 1176—Riesling.

VIDELA, Alfredo. Viño Samo Alto. Ovalle.
No. 1177—Semillon.

SCHWARZEMBERG, Gedeon. Osorno.
No. 1178—Corriente.

VENTURA, Hermanos. La Haciendita. Santiago.
No. 1179—Semillon.

TOCORNAL, José. Viña Algarrobal. Santiago.
No. 1180—Corriente.

COUSIÑO, Arturo. Viña Macu. Santiago.
No. 1181—Corriente, 1886.
No. 1182—Corriente, 1892.
No. 1183—Verdot, 1894.
No. 1184—Verdot, 1898.

CORREA A., J. Gregorio. Viña San Pedro. Lontué.
No. 1185—Pinot.
No. 1186—Cabernet.

UNDURRAGA, Francisco R. Viña San Vicente. Victoria
No. 1187—Corriente.

ERRAZURIZ, Zócimo. Viña Santa Isabel. Victoria.
No. 1188—Corriente.

OCHAGAVIA, Silvestre. Chacra Ochagavia. Santiago.
No. 1189—Especial.
No. 1190—Corriente.

LARRAIN, Ladislao. Viña Providencia. Melipilla.
No. 1191—Carbenet.
No. 1192—Pinot.

CONCHA, Emiliana S. de. Viña Concha y Toro. Santiago.
No. 1193—Reservado, 1890.
No. 1194—Special, 1893.
No. 1195—Special, 1894.
No. 1196—Corriente, 1892.
No. 1197—Corriente, 1895.
No. 1198—Corriente, 1896.
No. 1199—Corriente, 1897.
No. 1200—Corriente, 1898.

ERRAZURIZ, V. Rafael. Viña Panquehue. Los Andes.
No. 1201—Reservado.
No. 1202—Cabernet.
No. 1203—Corriente.

SUBERCASEAUX, Ramon. Chacra Subercaseaux. Santiago.
No. 1204—Reservado.
No. 1205—Cabernet.
No. 1206—Corriente.

DIAZ, Manuel J. Viña Victoria. Victoria.
No. 1207—Cabernet.

VIAL, Leonidas. Viña Vial. Santiago.
No. 1208—Cabernet.
No. 1209—Pinot.

NEBEL, M. Alejandro. Viña Romelia. Freirina.
No. 1210—Corriente.

FERNANDEZ CONCHA, D. Santa Rita. Maipo.
No. 1211—Especial.
No. 1212—Cabernet reservado.
No. 1213—Corriente.

EASTMAN, Adolfo. Viña Urmeneta. Limache.
No. 1214—Special.
No. 1215—Cabernet, 1888.
No. 1216—Corriente, 1887.
No. 1217—Corriente, 1889.

BROWN, Guillermo. Viña Escorial de Panquehue. Los Andes.
No. 1218—Especial reservado.
No. 1219—Corriente.

CERDA Y TALAVERA. Viña Santa Lucia. Lontué.
No. 1220—Special.
No. 1221—Pinot.
No. 1222—Cabernet.

VELASCO, Vicente. Viña Trinidad. Limache.
No. 1223—Reservado.
No. 1224—Especial.
No. 1225—Cabernet.

MARAMBIO, Nicanor. Chacra Marambio. Santiago.
No. 1226—Cabernet.

PALMAE, Hijos. Hacienda Itata. Taiguen.
No. 1227—Corriente.

MANDIOLA, Telésforo. Chacra Atacama. Victoria.
No. 1228—Corriente.

DONOSO, Mateo. Viña San Antonio. Talca.
No. 1229—Corriente.

VERGARA, C. Bonifacio. Viña San Luis. Talca.
No. 1230—Corriente.

VIDELA, Alfredo. Viña San Antonio. Ovalle.
No. 1231—Cabernet, 1892.
No. 1232—Corriente, 1898.

UNNA, Alfredo E. Viña Ranquil. Coelemu.
No. 1233—Pinot.
No. 1234—Table wine.
No. 1235—Corriente.

ECHENIQUE, José Miguel. Viña Mercedes. Caupolican.
No. 1236—Corriente.

DÉLANO, Eduardo. Viña San Jorge. Santiago.
No. 1237—Corriente.

DÉLANO, Eduardo. Hacienda El Majuelo. Coelemu.
No. 1238—Corriente.

ROGERS, ZERRANO & CO. Tomé.
No. 1239—Corriente.

BERTRAND & CO. Chacra Huguet. Quillota.
No. 1240—Quillota.

CLASS 155—Sherry, Madeira, Port.

FERGIE, Jorge. Huasco Alto. Vallenar.
No. 1241—Nectar.
No. 1242—Ambar.
No. 1243—Chipre.
No. 1244—Generoso seco.

QUINTA NORMAL DE AGRICULTURA. Santiago.
No. 1245—Cauquenes, sweet.
No. 1246—Cauquenes, dry.

NARANJO, Joaquin. Viña San Carlos. Elqui.
No. 1247—Malvasia.
No. 1248—Oporto.

MARTINEZ R. Lisandro. Viña Velenunque. Bulnes.
No. 1249—Blanco asoleado.

TORRES Y JARPA. Viña Quinta. Huasco.
No. 1250—Armidita, 1880.
No. 1251—Armidita, 1890.

VENTURA, Hermanos. La Haciendita. Santiago.
No. 1252—Generoso, 1888.
No. 1253—Malaga. 1886.
No. 1254—Ajerezado, 1882.
No. 1255—Asoleado Cauquenes, 1884.
No. 1256—Moscatel.
No. 1257—Byrrh (quina wine).

COMMISSION OF CHILE. Santiago.
No. 1258—Quina wine of F. Rembadi. Valparaiso.

ROGERS, ZERRANO & CO. Tomé.
No. 1259—Asoleado.

PERALTA, Juan de Dios. Las Cruces. Elqui.
No. 1260—Oporto (quina wine).

CHIARTANO, Luis. Valparaiso.
No. 1261—Elixir of coca.

DIAZ, Abraham & Tobias. Viña Calera. Quillota.
No. 1262—Wine of quina.
No. 1263—Wine of kola and quina.
No. 1264—Wine of hierro-quina (white Reservado).
No. 1265—Wine of hierro-quina.
No. 1266—Wine of quina (white Reservado).

COMMISSION OF CHILE. Santiago.
No. 1267—Crown port. Diaz & Co. Valparaiso.
No. 1268—Star port. Diaz & Co. Valparaiso.

MIRANDA RIOS, Hermanos. Viña Maiten. Vallenar.
No. 1269—Dark (11 years).
No. 1270—Topacio (7 years).
No. 1271—Opalo (3 years).

TORRES, José Dolores. Viña Pozo. Elqui.
No. 1272—Dark Generoso, 1870.

CLASS 156—Sparkling Wines.

MARAMBIO, Nicanor. Chacra Marambio. Santiago.
No. 1273—Sweet.
No. 1274—Half-sweet.
No. 1275—Dry.

PEREZ, Marcos & Co. Serena.
No. 1276—Grape cider from Elqui, pasteurized.

PEREZ & CO., A. Los Andes.
No. 1277—Champagne.

COMMISSION OF CHILE. Santiago.

No. 1278—Tisane Mousseline of Victor de Foré.
No. 1279—Champagne Sud Americana (sweet) of T. Rembadi. Valparaiso.
No. 1280—Champagne Sud Americana (half dry).
No. 1281—Champagne Sud Americana (dry) of T. Rembadi. Valparaiso
No. 1282—Champagne "Chile" (sweet) of T. Rembadi. Valparaiso.
No. 1283—Champagne "Sport" (sweet) of T. Rembadi. Valparaiso.
No. 1284—Champagne "Reservado" (dry) of T. Rembadi. Valparaiso.

CLASS 157—Methods of Expressing the Juice of the Grape, etc., of Fermenting, Storing, Racking, Bottling and Packing; Wine Cooperage.

COMMISSION OF CHILE. Santiago.

No. 1285—Machine for expressing the juice of the grape.
No. 1286—Wine pump.

Both are made by Raab Hnos of Santiago.

STRICKLER & KUPFER, Hnos. Santiago.

No. 1287—Wine pump.

ARAVENA, Jovino. Santiago.

No. 1288—Foudre for wine cellar.
No. 1289—Barrel for beer.
No. 1290—Torpedo for champagne.
No. 1291—Foudre for table use.
No. 1292—Small foudre.
No. 1293—Small foudre.
No. 1294—Model of fermenting cube.
No. 1295—Model of fermenting cube.
No. 1296—Six bordelaises.
No. 1297—Two barrels for house use.
No. 1298—Model of tank.
No. 1299—Funnel.
No. 1300—Six tanks.
No. 1301—Large bottle (demijohn).
No. 1302—Keg of bronze.
No. 1302a—Clapet, valve.

CLASS 158—Brandy of all kinds.

QUINTA NORMAL DE AGRICULTURA. Santiago.

No. 1303—Cognac, fine champagne, 1890.
No. 1304—Cognac, fine champagne, 1895.

VENTURA, Hermanos. La Haciendita-Santiago.

No. 1305—Cognac Etilico—"Una Estrella."
No. 1306—Cognac Etilico—"Siete Estrellas."
No. 1307—Pisco of Italian grapes (kind of brandy).
No. 1308—Anis del Mono (Anise-seed brandy).
No. 1309—Kirsch of cherries.

DREYSSE A. 2d. Santiago.
No. 1310—Apparatus for distilling brandy.

CRUZ, V. R., José. Santiago.
No. 1311—Cognac tónico—"El cometa" (Cognac tonic).

MENESES, Napoleon. Los Andes.
No. 1312—Cognac Etilico (Ethilic cognac).
No. 1313—Anisado (Anise-seed brandy).

HERNANDEZ, Luis. Elqui.
No. 1314—Pisco pastilla especial (Special Pisco brandy of pastilla grapes).
No. 1315—Pisco Italia.

ARACENA, NAVARRO & CO. Elqui.
No. 1316—Pisco especial reservado (Special Pisco).
No. 1317—Pisco uva pastilla (Pisco pastilla grapes).

NARANJO, Joaquin. San Carlos–Elqui.
No. 1318—Pisco "Mosto Verde."

NEBEL, Alejandro M. Viña Romelia–Huasco.
No. 1319—Pisco semillon.

PERALTA, Felix, A. La Florida–Elqui.
No. 1320—Pisco fino de uva Italia (Italian grapes Pisco).

VIDELA, Alfredo. Samo Alto–Ovalle.
No. 1321—Pisco Superior.

ORTUZAR DE VALDES, Ana (Señora). Cunaco–San Fernando.
No. 1322—Aguardiente de uva (Grape brandy).

STORK, José. Valdivia.
No. 1323—Cominillo (Oesterreichischer, Kummel).

ALBA, Olegario. Elqui.
No. 1324—Pisco uva pastilla especial (Pastilla grapes, special Pisco).

PERALTA, Juan de Dios. Tres Cruces–Elqui.
No. 1325—Pisco especial (Special Pisco).
No. 1326—Pisco uva pastilla (Pastilla grapes Pisco).

GALENO, Salvador. Serena.
No. 1327—Pisco superior de Elqui (Elqui grapes, superior Pisco).
No. 1328—Pisco uva pastilla (Pastilla grapes, Pisco).
No. 1329—Pisco uva pastilla, Italia (Pastilla Italian grapes Pisco).

ALEXANDRE, P. S. Santiago.
No. 1330—Cherry brandy.
No. 1331—Kummel.

LELIVA, Luis. San Fernando.

No. 1332—Aguardiente especial (Special brandy).

SCHMIDT & CO., Carlos. Osorno.

No. 1333—Puro Aguardiente Etilico (Pure Ethilic brandy).

MIRANDA RIOS, Hermanos. Viña Maitén–Vallenar.

No. 1334—Pisco fino de uva Italia (Fine Pisco of Italian grapes).

GROUP 47—LITERATURE.

CLASS 159—Literature, History and Statistics of Viticulture.

COMMISSION OF CHILE. Santiago.

No. 1335—Notes on the vine-growing industry in Chile, 1901.

No. 1336—"Asociación de Viticultores" (Association of Viticultors), 1895.

ESTACIÓN DE PATOLOJÍA VEJETAL. Santiago.

No. 1337—"La antracnosa de la vid" (The antracnosis of the vine), by Gaston Lavergne, 1901.

No. 1338—"Enfermedades del vino" (Diseases of the vine), 1900.

No. 1339—"Observaciones sobre algunas enfermedades de la vid" (Observations on certain vine diseases), by Gaston Lavergne, 1900.

No. 1340—"Los viñedos nuevos—Cómo debemos reconstituir nuestros viñedos?" (The new vineyards—How must we reform our vineyards?), by Gaston Lavergne, 1900.

INSTITUTO AGRÍCOLA. Santiago.

No. 1341—"Estudios sobre la fermentación vinosa ó fermentación alcohólica" (Studies on vinous or alcoholic fermentation), by Maximiliano del Campo, 1897.

No. 1342—"Vinificación—La mezcla de los vinos" (The manufacture and mixture of wines), by Julio Figueroa, 1896.

No. 1343—"Apuntes para el curso de viticultura" (Notes on the study of viticulture), 1900.

No. 1344—"Apuntes para el curso de vinificación" (Notes for the course of wine manufacturing), 1900.

SOCIEDAD NACIONAL DE VITICULTORES. Santiago.

No. 1345—"Boletin de la Sociedad" (Bulletin issued by the Society), third year, 1900.

ROJAS L. Manuel. Santiago.

No. 1346—"Tratado de Viticultura y Vinificación" (A treatise on viticulture and wine-making), 1897.

DIVISION VI.

FORESTRY AND FOREST PRODUCTS.

GROUP 48.
COMMERCIAL EXHIBITS (FOREST PRODUCTS).

CLASS 160—Unmanufactured Wood or in the Rough State—Logs and Sections of Trees.

COMMISSION OF CHILE. Santiago.

CENTRAL PROVINCES.

No. 1347—Canelo (*Drymis chilensis*).
No. 1348—Collivoqui (*Lardizabala bisternata*).
No. 1349—Lilen (*Azara serrata*).
No. 1350—Maqui (*Aristotela maqui*).
No. 1351—Patagua (*Tricuspidaria dependens*).
No. 1352—Guayacan (*Porlieria higrométrica*).
No. 1353—Pelú (*Edwardsia microphylla*).
No. 1354—Maiten (*Maytenus chilensis*).
No. 1355—Naranjillo (*Villaresia mucronata*).
No. 1356—Tralhuen (*Trevoa quinquenervia*).
No. 1357—Trevo (*Trivoa trinervia*).
No. 1358—Chacay (*Colletia doniana*).
No. 1359—Huingan (*Duvana dependens*).
No. 1360—Litres (*Litrea venenosa*).
No. 1361—Molle (*Litrea molle*).
No. 1362—Espino (*Acacia cavenia*).
No. 1363—Quillay (*Quillaja saponaria*).
No. 1364—Huayu (*Kagenekia oblonga*).
No. 1365—Olivillo (*Kagenekia augustifolia*).
No. 1366—Chequen (*Eugenia chequen*).
No. 1367—Arrayan (*Eugenia apiculata*).
No. 1368—Colliguay (*Colliguaya odorífera*).
No. 1369—Boldo (*Boldoa fragrans*).
No. 1370—Sauce (*Salix Humboldtiana*).
No. 1371—Nipa (*Escalonis illiniti*).
No. 1372—Sun (*Escallania revoluta*).
No. 1373—Cipres (*Libocedrus chilensis*).
No. 1374—Lingue (*Persea lingue*).
No. 1375—Liñe (*Persea Meyeniana*).

AGRICULTURAL EXHIBIT.

No. 1376—Culen (*Posoralea glandulosa*).
No. 1377—Colligue (*Chusquea Cumingii*).
No. 1378—Peumo (*Cryptocaria Peumus*).
No. 1379—Quisco (*Cereus quisco*).
No. 1380—Sun (*Escallania myrtoidea*).
No. 1381—Retama (*Sarothamnus scoparius*).
No. 1382—Pañil (*Buddleia globosa*).
No. 1383—Crucero (*Colletia spinosa*).
No. 1384—Corcolen (*Azara Gilliesii*).
No. 1385—Corontillo (*Eucleia oblonjifolia*).
No. 1386—Michay (*Berberis buxifolia*).
No. 1387—Guillipatagua (*Villaresia mucronata*).
No. 1388—Pimiento (*Schimus molle*).
No. 1389—Algarrobo (*Prosopis siliquatrum*).
No. 1390—Bellota (*Bellota Miersii*).
No. 1391—Pitra (*Eujenia multiflora*).
No. 1392—Temo (*Eujenia temu*).
No. 1393—Roble (*Fagus obliqua*).
No. 1394—Coyhue (*Fagus Dombeyi*).
No. 1395—Raulí (*Fagus procera*).

INTENDENCIA DE ATACAMA. Copiapó.

No. 1396—Negro or carbon (*Black charcoal*).
No. 1397—Algarrobo (*Prosopis siliquastrum*).
No. 1398—Retama (*Sarothamnus scoparius*).
No. 1399—Jacarandá (*Jacarandá-mimosiafolia*).
No. 1400—Berraco (*Conium maculatum*).
No. 1401—Churco (*Oxalis gigantea*).
No. 1402—Chañar (*Gourliea chilensis*).
No. 1403—Lucuma (*Lucuma obovota*).
No. 1404—Algarrobilla (*Balsamocarpon brevifolium*).
No. 1405—Barrilla blanca (*Adesmia cinerea*).
No. 1406—Olivillo (*Kagenekia augustifolia*).
No. 1407—Molle (*Litrea molle*).
No. 1408—Olivo (*Olea europea*).

INTENDENCIA DE TARAPACA. Iquique.

No. 1409—Chañar (*Gourlica chilensi*).
No. 1410—Tamar.
No. 1411—Tamarugo (*Prosopis tamarugo*).
No. 1412—Algarrobo (*Prosopis siliquastrum*).

COMMISSION OF CHILE. Santiago. Collection of woods from "Niblinto" Farm, Angol.

No. 1413—Laurel (*Laurelia aromática*).
No. 1414—Maniu (*Podocarpus chilina*).
No. 1415—Roble (*Fagus obliqua*).
No. 1416—Luma (*Myrtus luma*).
No. 1417—Avellano (*Gucvina avellana*).
No. 1418—Cipres (*Libocedrus chilensis*).
No. 1419—Raulí (*Fagus procera*).
No. 1420—Coyhue (*Fagus Dombeyi*).

BARRIOS, Hermanos. Angol (Perquenco).

No. 1421—Roble pellin (*Fagus obliqua*).
No. 1422—Palo negro (*Eujenia grata*).
No. 1423—Chequen (*Eujenia cheken*).
No. 1424—Maiten (*Maytenis chilensis*).
No. 1425—Maniu (*Prodocarpus chilina*).
No. 1426—Pitra (*Eujenia multiflora*).
No. 1427—Olivillo (*Kagenekia augustifolia*).
No. 1428—Canelo (*Drymis chilensis*).
No. 1429—Lingue, young (*Persea lingue*).
No. 1430—Laurel, young (*Laurelia aromática*).
No. 1431—Laurel, old (*Laurelia aromática*).
No. 1432—Temu de cordillera (*Eujenia temu*).
No. 1433—Radal (*Lomatia obliqua*).
No. 1434—Maqui (*Aristotela maqui*).
No. 1435—Avellano (*Guevina avellana*).
No. 1436—Temu (*Eujenia temu*).
No. 1437—Pelu (*Edwardsia microphylla*).
No. 1438—Ulmo (*Eucryphia cordifolia*).

BARRIENTOS, M. Osorno.

No. 1439—Tecke (*Aextoxicum punctatum*).
No. 1440—Ulmo (*Eucryphia cordifolia*).
No. 1441—Lingue (*Persea lingue*).
No. 1442—Quiaca (*Caldcluvia paniculata*).

COMITÉ DE PROPAGANDA DE ABONOS. Santiago.

FIRST ZONE.

No. 1443—Negro or carbon (*Black charcoal*).
No. 1444—Guayacan (*Porlieria hygrométrica*).
No. 1445—Olivillo (*Kagenekia augustifolia*).

FOURTH ZONE.

No. 1446—Alamo (*Populus pyramidalis*).
No. 1447—Raulí (*Fagus procera*).
No. 1448—Maniu (*Podocarpus chilina*).
No. 1449—Laurel (*Laurelia aromática*).
No. 1450—Lleuqui (*Podocarpus andina*).
No. 1451—Coyhue (*Fagus Dombeyi*).
No. 1452—Lingue (*Persea lingue*).
No. 1453—Roble (*Fagus obliqua*).
No. 1454—Maiten (*Maytenus chilensis*).
No. 1455—Manzano (*Pyrus malus*).
No. 1456—Eucaliptus (*Eucaliptus globulo*).
No. 1457—Ciruelo (*Prunus domestica*).
No. 1458—Roble (pellin) (*Fagus obliqua*).
No. 1459—Lingue, white (*Persea lingue*).
No. 1460—Lingue, red (*Persea lingue*).
No. 1461—Alerce (*Libocedrus tetragona*).
No. 1462—Maniu (*Podocarpus chilina*).

No. 1463—Nogal (*Juglans regia*).
No. 1464—Avellano (*Guevina avellana*).
No. 1465—Luma (*Myrtus luma*).
No. 1466—Meli (*Myrtus meli*).
No. 1467—Boldo (*Boldoa fragrans*).
No. 1468—Pelu (*Edwardsia microphylla*).
No. 1469—Cipres (*Libocedrus chilensis*).
No. 1470—Esse.
No. 1471—Raral (*Lomatia obliqua*).
No. 1472—Laurel (*Laurelia aromática*).
No. 1473—Raulí (*Fagus procera*).

ESCUELA PRACTICA DE AGRICULTURA. Chiloé.
No. 1474—Tayu (*Flotovia diaconthoides*).
No. 1475—Pelu (*Edwardsia microphylla*).
No. 1476—Tepu.
No. 1477—Coyhue (*Fagus Dombeyi*).
No. 1478—Canelo (*Drymis chilensis*).
No. 1479—Arrayan (*Eujenia apiculata*).
No. 1480—Maniu (*Podocarpus chilina*).
No. 1481—Luma (*Myrtus luma*).
No. 1482—Quiaca (*Caldcluvia paniculata*).
No. 1483—Ciruelillo (*Embothrium coccineum*).
No. 1484—Avellano (*Guevina avellana*).

BASCUNAN S. M. Ascanio–Ocoa.
No. 1485—Palma (*Micrococus chilensis*).

CLASS 161—Manufactured Wood or prepared for use—Lumber, Shingles, Sheathing, Flooring, Mouldings, Stair-rails, etc., Ornamental Wood Veneers.

COMMISSION OF CHILE. Santiago. Collection of woods from Osorno.
No. 1486—Roble (*Fagus obliqua*).
No. 1487—Olivillo (*Kageneckia augustifolia*).
No. 1488—Coyhue (*Fagus Dombeyi*).
No. 1489—Ulmo (*Eucriphia cordifolia*).
No. 1490—Lingue (*Persea lingue*).
No. 1491—Laurel (*Laurelia aromática*).
No. 1492—Radal (*Lomatia obliqua*).
No. 1493—Raulí (*Fagus procera*).
No. 1494—Lleuqui (*Podocarpus andina*).

COMITE DE PROPAGANDA DE ABONOS. Santiago.
No. 1495—Raulí (crespo) (*Fagus procera*).
No. 1496—Luma (*Myrtus luma*).
No. 1497—Nogal, americano (*Juglans regia*).
No. 1498—Maniu (*Podocarpus chilina*).
No. 1499—Laurel (*Laurelia aromática*).
No. 1500—Espino (*Acacia cavenia*).
No. 1501—Lleuqui (*Podocarpus andina*).
No. 1502—Coyhue (*Fagus Dombeyi*).

No. 1503—Acacia (*Robinia*).
No. 1504—Nogal (*Lomatia obliqua*).
No. 1505—Raulí (*Fagus procera*).
No. 1506—Lingue (*Persea lingue*).
No. 1507—Litre (*Litrea venenosa*).
No. 1508—Roble (*Fagus obliqua*).
No. 1509—Alamo (*Populus pyramidalis*).
No. 1510—Canelo (*Drymis chilensis.*)
No. 1511—Temu (*Eujenia temu*).
No. 1512—Avellano (*Guevina avellana*).

HERMAN, Julian. Fábrica "El Progreso." Concepción.

Algarrobo (*Prosopis siliquastrum*).
No. 1513—Slab.
No. 1514—Two collar frames.
No. 1515—Felloe.

Avellano (*Guevina avellana*).
No. 1516—Veneer for carriage body.
No. 1517—Slab.

Canelo (*Drymis chilensis*).
No. 1518—Slab.

Alerce (*Libocedrus tetragona*).
No. 1519—Slab.

Coyhue (*Fagus Dombeyi*).
No. 1520—Slab.

Espino (*Acacia cavenia*).
No. 1521—Slab.
No. 1522—Cone.

Huaÿu (*Kageneĸia oblonga*).
No. 1523—Two spokes, finished.
No. 1524—Unfinished spoke.
No. 1525—Slab.

Patagua (*Tricus pidaria dependens*).
No. 1526—Slab.

Laurel (*Laurens nobilis*).
No. 1527—Two slabs.

Lingue (*Persea lingue*).
No. 1528—Four slabs.
No. 1529—Curled strip.
No. 1530—Back for chair.

Litre (*Litrea venenosa*).
No. 1531—Eight slabs.
No. 1532—Bowling ball.
No. 1533—Cube.
No. 1534—Hub, in rough.
No. 1535—Spoke.
No. 1536—Plate.

No. 1537—Sawed piece.
No. 1538—Four curved pieces.
No. 1539—Handle for sledge-hammer.
No. 1540—Tooth for cogwheels.
No. 1541—Hub.

Luma (*Myrtus luma*).

No. 1542—Spoke, unfinished.
No. 1543—Three spokes, unfinished.
No. 1544—Polished piece.
No. 1545—Two slabs.
No. 1546—Rim.
No. 1547—Arch.
No. 1548—Spoke for wood hub.
No. 1549—Teeth for cogwheels.
No. 1550—Slab.

Ciruelo (*Prunus doméstica*).

No. 1551—Slab.

Maniu (*Saxe-Gothea conspicua*).

No. 1552—Slab.

Olivo (*Olaea europea*).

No. 1553—Slab.

Olivo sevillano (*Olea silo-estris*).

No. 1554—Slab.

Tayu (*Flotovia diacanthoides*).

No. 1555—Slab.

Roble (*Fagus obliqua*).

No. 1556—Slab.

Peumo (*Cryptocaria peumus*).

No. 1557—Slab.

Acacia (*Acacia Robinia*).

No. 1558—Slab.
No. 1559—Spoke, in rough.

Pelmen (*Araucaria imbricata*).

No. 1560—Three slabs.

Quillay (*Quillaja saponaria*).

No. 1561—Slab.

Radal (*Lomatia obliqua*).

No. 1562—Three slabs.
No. 1563—Four slabs.
No. 1564—Knob.

Raulí (*Fagus procera*).

No. 1565—Eight slabs.

Retamilla (*Linum aquilinum*).

No. 1566—Slab.

Temu (*Eujenia Temu*).

No. 1567—Slab.

Ulmo (*Eucryphia cordifolia*).

No. 1568—Slab.

Espino (*Acacia cavenia*).

No. 1569—Two slabs.
No. 1570—Two spokes.
No. 1571—Two sledge-hammer handles.
No. 1572—Scythe handle.
No. 1573—Half circle.
No. 1574—Four rims.
No. 1575—Four collar frames.
No. 1576—Two strips.
No. 1577—Parts for boat.
No. 1578—Circle.
No. 1579—Circle.

Alamo (*Populus pyramidalis*).

No. 1580—Three slabs.

Eucalyptus (*Eucalyptus globulus*).

No. 1581—Slab.

Fresno (*Fraxinus*).

No. 1582—Two slabs.

Haya (*Fagus sylvatica*).

No. 1583—Mud-guard.
No. 1584—Two slabs.
No. 1585—Two slabs.

Olmo (*Ulmus*).

No. 1586—Four slabs.
No. 1587—Rim for wheel.
No. 1588—Mud-guard.
No. 1589—Five collar frames.
No. 1590—Boat part.
No. 1591—Two arches for carriage top.
No. 1592—Arch for drum.

Encina (*Quercus*).

No. 1593—Two slabs.

Acacia (*Acacia robinia*).

No. 1594—Set of rims.

DOUZET, Eujenio. Santiago.

Acacia (*Acacia robinia*).

No. 1595—Two spokes.

Luma (*Myrtus luma*).

No. 1596—Spoke.

Espino (*Acacia cavenia*).

No. 1597—Spoke.

Litre (*Litrea venenosa*).

No. 1598—Rim.

PEREZ, José Jesús. Santiago.

No. 1599—Slab parquetry flooring, foreign woods.
No. 1600—Slab parquetry flooring, foreign and native woods.
No. 1600a—Slab parquetry flooring, native woods.

CLASS 162—Woody Substances, used for Special Purposes—Wood-pulp, Dye Woods, Tanning Woods and Barks, Corks and Substitutes.

CRUZ, F. E. Vallenar.

No. 1601—Algarrobilla (*Balsamocarpon brevifolium*)

COMMISSION OF CHILE. Santiago.

No. 1602—Lingue bark (whole, crushed and ground).
No. 1603—Quillay (soap bark).

CRUZ MONTT & CO. Santiago.

No. 1604—Quillay.
No. 1605—Dry Quillay extract.

ELZO & CO. Santiago.

No. 1606—Liquid Quillay extract.
No. 1606a—Quillay bark.

FONTECILLA, Mariano. Santiago.

No. 1607—Liquid Quillay extract.

CLASS 163—By-products, Gums, Resins, Vegetables, Wax Lichens, Mosses, Pulu, etc., used for Bedding, Upholstering, and for Mechanical Purposes.

SCHULZE, Emilio. Valparaiso.

No. 1608—Crin vegetal.

VERDUGO & ZARANDONA. Los Andes.

No. 1609—Combed hemp.

CHARME, Eduardo. Santiago.

No. 1610—Combed flax.

CABALLERO, Emiliano. Graneros.

No. 1611—Combed flax.

GROUP 47.

CLASS 169—Education in Forestry, Literature—Books and Educational Means, etc.

GUAJARDO, Amador. Iquique.

No. 1612—"Botánica médica nacional, ó sea plantas medicinales de Chile" (National medical botany or medicinal plants of Chile), 1890.

DIVISION VII.

FISH AND FISHERIES.

GROUP 50.
FISH AND OTHER FORMS OF AQUATIC LIFE.

CLASS 170—Fishes.

COMMISSION OF CHILE. Santiago. By order of this Commission the following collection of specimens, stuffed and in alcohol, was formed by Señor don Baldomero Wolnitzki, Director of the Industrial Museum of the "Sociedad de Fomento Fabril" of Santiago:

No. 1613—Congrio colorado. (Fam. Ophidiidae, *Genypterus chilensis.*) Common, much valued. (1.)

No. 1614—Congrio negro. (Fam. Ophidiidae, *Genypterus blacodes.*) Very common, but little valued. (3.)

No. 1615—Arenque. (Fam. Clupeidae, *Clupea sp.*) Common, and little valued. (2.)

No. 1616—Raya grande. (Fam. Rajidae, *Raja flavirostris.*) (10.)

No. 1617—Raya chica. (Fam. Rajidae, *Raja chilensis*, front view.) (11.)

No. 1618—Raya chica. (Fam. Rajidae, *Raja chilensis*, back view.) (11a.)

No. 1619—Tiburon. (Fam. Carchariidae, *Carcharias sp.*) (51.)

No. 1620—Azulejo. (Fam. Carchariidae, *Carcharias glauca.*) (14.)

No. 1621—Sardineta. (Fam. Clupeidae, *Clupea sp.*) Common and edible. (15.)

No. 1622—Jerguilla. (Fam. Sparidae, *Haplodactylus vermiculatus.*) Common, but little valued. (16.)

No. 1623—Liza. (Fam. Mugilidae, *Mugil liza.*) (17.)

No. 1624—Pejerrey de agua dulce. (Fam. Atherinidae, *Atherina microlepidota.*) Calera, Rio Aconcagua. Fresh water fish, common and valued. (18b and 53.)

No. 1625—Corvina. (Fam. Pristipomat., *Cylus Montti*, Delfin.) Common and much valued. (19.)

No. 1626—Tonina. (Fam. Delphinidae, *Phocaena Philippi.*) (20c.)

No. 1627—Torito. (Fam. Trachinidae, *Bovichtis diacan.*) Rarely found in market. (21.)

No. 1628—Pintarroja. (Fam. Scylliidae, *Scyllium chilensis.*) Common, edible. (22 B.)

No. 1629—Cabrilla española. (Fam. Percidae, *Serranus sp.*) Rarely found in market. (23.)

No. 1630—Machuelo. (Fam. Clupeidae, *Alosa maculata.*) Principal bait fish. (24 B.)

FISHERIES EXHIBIT.

No. 1631—Peje gallo ♂. (Fam. Chimaeridae, *Callorhyncus anctarticus.*) (25.)
No. 1632—Gabinza or cavinza. (Fam. Cirrhitidae, *Mendosoma coerulescens.*) (26.)
No. 1633—Sierra. (Fam. Trachiaridae, *Thyrsites chilensis.*) (27.)
No. 1634—Peje sapo. (Fam. Gobiesocidae, *Gobiesox sp.*) (34.)
No. 1635—Cabrilla colorado. (Fam. Triglidae, *Sebastes oculata.*) Common, edible. (36 B.)
No. 1636—La Vieja. (Fam. Labridae, *Graus nigra*, Philippi.) (38.)
No. 1637—Blanquillo. (Fam. Trachinidae, *Latylus yugularis.*) Valued, eaten smoked. (39 B.)
No. 1638—Pejerrey de mar. (Fam. Atherinidae, *Atherina laticlavia.*) Abundant and valued. (40 B.)
No. 1639—El Mote. (Fam. Atherinidae, *Atherina laticlavia juv?*)
No. 1640—Chuquisa. (Fam. Carangidae, *Seriolella sp.*) (41 B.)
No. 1641—Bagre de mar. (Fam. Batrachid., *Batracus porosus.*) (42.)
No. 1642—Rollizo. (Fam. Trachinidae, *Pinguipes chilensis.*) Common and edible. (45 B.)
No. 1643—La Pescada. (Fam. Gadidae, *Merlus Gayi.*) The most common and cheapest in Valparaiso. (44 B.)
No. 1644—Anguila negra. (Fam. Myxinidae, *Bdellostoma polytrema*, Girard.) (45.)
No. 1645—Robalo. (Fam. Trachinidae, *Eliginus maclovinus.*) Abundant and edible. (46.)
No. 1646—Anguila blanca. (Fam. Muraenid., *Ophysurus remiger.*) (48 and 58.)
No. 1647—Furel or jurel. (Fam. Carangidae, *Caranse chilensis.*) (49 B.)
No. 1648—Lenguado. (Fam. Pleuronect., *Hippoclossus kingii.*) (50.)
No. 1649—Trucha de agua dulce. Fresh water trout. (Fam. Percidae, *Percatrucha*), Rio Aconcagua. (52.)
No. 1650—Castañeta. (Fam. Pomacenti, *Heliastes crusma.*) Edible, but little valued. (54.)
No. 1651—Pampanito. (Fam. Scombrid, *Stromateus maculatus.*) Abundant, but not valued. (56.)
No. 1652—Bonito. (Fam. Scombrid, *Pelamys chilensis.*) Rare. (62.)
No. 1653—Carassino dorado. (Fam. Cyprinidae, *Carassinus aurato.*) Paine lagoon. (64.)
No. 1654—Carassino comun. (Fam. Cyprinidae, *Carassinus vulgaris.*) Paine lagoon. (56.)
No. 1655—Villagai. (*Chilodactylus sp.*) .(77.)
No. 1656—Bagre. (*Nematogenys inermis.*) Santiago. (131.)
No. 1657—La Pocha. (*Percichtys melanops*, *Percosoma mel.*, *Perca pocha.*) Common, valued. Fresh water fish.

NOTES: All these specimens, except Nos. 1624, 1649, 1653, 1654, and 1656, are caught in Valparaiso. Numbers in parentheses are those used by the Collector.

CLASS 171—Aquatic Mammalia, etc.

COMMISSION OF CHILE. Santiago.

No. 1658—Skin and skull of Coipu (*Myopotamus coipu*). Santiago.
No. 1659—Skeleton of Chungungo (*Lutra felina.*) Valparaiso.
No. 1660—Seal skin.

CLASS 172—Aquatic Birds.

COMMISSION OF CHILE. Santiago.

DUCKS.

No. 1661—Pato tripoca (*Erismatura vittata*, Rh.). (119.)

No. 1662—Pato tripoca (*Erismatura ferruginea*, Egt.). (125.)

No. 1663—Pato jergon grande (*Daphila spinicauda*, Beill.—*Querquedula escuoides*, Egt.). (121.)

No. 1664—Pato jergon chico ♀ and ♂ (*Nettion flavirostres*, Beill.—*Querquedula creccoides.*) (129.)

No. 1665—Pato rinconero ♀ and ♂ (*Heteronetta atricapilla*, *Anasmelano rephala*, Beill). (122.)

No. 1666—Pato capuchino (*Querquedula versicolor*, Beill.—*Maculirostris*, Leiht.). (124.)

No. 1667—Pato cuchara (*Spatula platalea*, Beill.—*Rhynchaspis maculata*, Gme.).

No. 1668—Pato colorado ♀ (*Spatula platalea*, Beill. — *Rhynchaspis maculata*, Gay.). (126.)

No. 1669—Pato colorado ♂ (*Querquedula cyanoptera*, Beill. — *Q. coeruleata*, Eyt.). (127 and 140.)

No. 1670—Pato negro ♂ (*Metopiana peposaia*, Beill.--*Fuligula metopies*, Gay.). (130.)

No. 1671—Pato real (*Mareia sibilatris*, Roepp.—*Mareia chilensis*, Egt.) (131.)

No. 1672—Pato creston (*Anas cristata*, Gme.). (132.)

VARIOUS.

No. 1673—Pitoitoi grande (*Totanus melanolencas*, Beill.—*Chilensis*, Ph.). (84 and 115.)

No. 1674—Perdiz de mar (*Numenius Hudsonicus*, Latt.). (85.)

No. 1675—Queltegue (*Belonopterus chilensis*, Mal.—*Vanellus Cayennensis*). (88.)

No. 1676—Avecasina chica (*Heteropygia maculata*, Beill. — *Triaga pectoralis*, Bon.). (93.)

No. 1677—Avecasina pintada ♀ (*Restratula*, *Rhynchoea*, *semicollaris*, Beill.). (105.)

No. 1678—Avecasina pintada ♂ (*Restratula*, *Rhynchoea*, *semicollaris*, Beill.). (106.)

No. 1679—Avecasina (*Gallinago Paraguiae*, Beill.). (118.)

NOTES: The above classification was made by Señor Federico Phillippi, Director of the National Museum of Santiago.

Numbers in parentheses are those used by the Collector.

CLASS 173—Reptiles.

COMMISSION OF CHILE. Santiago.

No. 1680—Rana. (Caliptocefalo, *Calyptocephalus Gayi.*) Santiago. Frog abundant in lakes, rivers and in irrigating canals; the body and hinder part being sold in the market. (79.)

FISHERIES EXHIBIT.

CLASS 174—Aquatic Invertebrates, Mollusks, Crustacea, etc.

COMMISSION OF CHILE. Santiago. Collected by Señor Baldomero Wolnitzki. (See Class 170.)

CRABS.

No. 1681—Jaiva mora. (Cyclometopa, *Xantus planus.*) Common and valued. (4 B.)
No. 1682—Jaiva peluda. (Cyclometopa, *Platycarcinus dentatus.*) Common, but little valued. (5 B.)
No. 1683—Jaiva comun. (Cyclometopa, *Cancer plebejus.*) Common, but little valued. (6 B.)
No. 1684—Jaiva blanca ó de playa. (Cyclometopa, *Platyonichus bipustulat.*) Common and valued. (7 B.)
No. 1685—Jaiva escorpión. (Cyclometopa, *Paraxanthus barbiger*). (55.)
No. 1686—Jaiva talicuna. (78.)

SHRIMPS.

No. 1687—Camarones de rio. (Caridade, *Palaemon caementarius.*) Rio Aconcagua. Rare and much valued. (8 B)
No. 1688—Camarones de rio. (Astacidae, *Astacus sp.*) Lagunas de Paine. (9 B.)
No. 1689—Ermitaño. (*Pegurus sp.*) Valparaiso.
No. 1690—Camaroncito de mar. (Caridídae, *Rhynchocinetes typus.*) Common in Valparaiso market. (35 B.)
No. 1691—Camaron de mar. (*Astacus sp.*) (35 B.)

LOBSTER.

No. 1692—Langostas de Juan Fernandez. (Palinuridae, *Palinurus frontalis.*) Abounds plentifully in Juan Fernandez Islands. (37.)

MUSSELS.

No. 1693—Choros. (Mytilidae, *Mytilus chorus.*) Talcahuano bay. (12.)
No. 1694—Choritos. (Mytilidae, *Mytilus sp.*) Common. (13.)

CLAMS.

No. 1695—Taca. (*Venus Thaca.*) Talcahuano. (169.)
No. 1696—Machas. (Maetridae, *Mesodesma donacia.*) (31.)

VARIOUS.

No. 1697—Estrella de mar. (*Asteracanthion aurantiacus.*) (28.)
No. 1698—Erizo de mar. (Echinidae, *Echinus sp.*) (47.)
No. 1699—Erizo negro. (*Echinondaris nigra.*) (162.)
No. 1700—Pulpo. (*Octopus sp.*)
No. 1701—Lapa. (Fissurelid, *Fissurella sp.*) Very abundant and edible. (68.)
No. 1702—Locos. (Purpuridae, *Concholepas peruviana.*) (30.)
No. 1703—Apretadora. (Chitonid., *Chiton sp.*) (71.)
No. 1704—Caracol. (*Trochus ater.*) (158.)
No. 1705—Pico. (*Balanus tintinabulum.*)
No. 1706—Solen Dorchei. (172.)

NOTE: Numbers in parentheses are those used by the Collector.

COMMISSION OF CHILE. Santiago.

No. 1707—Board with ten shells, specimens of the shell-fish used by the canning factories at Calbuco.

Ostra. (*Ostrea cibialis.*) Ancud. (176.)
Choro. (*Mytilus chorus.*) Calbuco. (12.)
Choro. (*Mytilus chorus.*) Melinka. (12.)
Cholga. (*Mytilus Magellanicus.*) Calbuco. (177.)
Cholga. (*Mytilus Magellanicus.*) Ancud. (179.)
Macha. (*Mesodesma donacia.*) Ancud. (31.)
Taca. (*Venus Thaca.*) Calbuco. (169.)
Loco. (*Concholepas peruvianus.*) (30.)
Erizo. (*Echinus albus.*) Calbuco. (161.)
Caracol. (*Trochus ater.*) Calbuco. (158.)

NOTE: Numbers in parentheses are those used by the Collector.

Not Classified.

COMMISSION OF CHILE. Santiago.

ALGAE (MARINE PLANTS USED AS FOOD).

No. 1708—Luche. (*Ulva lactuca.*) (75.)
No. 1709—Cochayuyo. (*Durvillae utilis.*)

GROUP 51—SEA AND FRESH WATER FISHING.

CLASS 175—Fishing Vessels and Boats, etc.

COMMISSION OF CHILE. Santiago. Models of fishing boats:

No. 1710. Bongo, boat used in the ports of the central Coast.
No. 1711. Cachucho, boat used by shell-fishing men.
No. 1712. Chalupa ballenera, boat used in whale fishing.

CLASS 176—Nets, Tackle and Appliances for Sea-fishing, etc.

COMMISSION OF CHILE. Santiago. Specimens of nets and lines used in sea fishing:

No. 1713—Trasmallo.
No. 1714—Espinel (fishing-line).
No. 1715—Cazonal.
No. 1716—Pejerreyera.
No. 1717—Cavincera.
No. 1718—Barredora.
No. 1719—Canasto jaivero (crab-fishing basket).

GROUP 52.

CLASS 180—Mammals, Fish, Mollusks, Crustacea, and other kinds of Water Animals, Dried, Smoked, Salted, Tinned, or otherwise prepared for food.

CANNED FISH AND SHELL-FISH.

FONCK & CO., Carlos. Valparaiso.

No. 1720—Langosta (*Palinurus frontalis*).
No. 1721—Bacalao (*Perca Fernandesiana*).
No. 1722—Vidriola (species tunny-fish).

ORTIZ & CO., A. Miguel. Calbuco.

No. 1723—Centollas (*Lithydes antarctica*).
No. 1724—Picos (*Balanus*).
No. 1725—Choros, in oil (*Mytilus chorus*).
No. 1726—Choritos (*Mytilus ovalis*).
No. 1727—Cholgas (*Mytilus chilensis*).
No. 1728—Cholgas, in oil (*Mytilus chilensis*).
No. 1729—Erizos (*Echinus albus*).
No. 1730—Cholgas (*Mytilus chilensis*).
No. 1731—Navajuelas (*Solen macha*).
No. 1732—Tacas (*Venus Thaca*).
No. 1733—Pejerreyes, in oil (*Atherinas*).
No. 1734—Robalo, in oil (*Pinguipes chilensis*).

GARCIA, Augustin. Guaytecas.

No. 1735—Choros, two kinds (*Mytilus chorus*).
No. 1736—Choros negros (*Mytilus chorus*).
No. 1737—Cholgas, three kinds (*Mytilus chilensis*).
No. 1738—Picos (*Balanus*).
No. 1739—Erizos (*Echinus albus*).
No. 1740—Locos (*Concholepas peruviana*).

GROUP 53—LITERATURE

CLASS 186—Works on Aquatic Zoology and Botany, and General Literature of Fisheries, Angling, Fish Culture and Deep-sea Explorations.

COMMISSION OF CHILE. Santiago.

No. 1741—"Informe del Piscicultor don W. Anderson Smith sobre la Introducción del Salmón en Chile," Santiago de Chile, 1897 (Report on Salmon culture in Chile, by Mr. W. Anderson Smith).

No. 1742—Account of the fishing industry in Chile, by Captain Don Luis Pomar. 1901.

No. 1743—Fisheries in Chile, 1901.

NOTE: These two last papers are printed specially for the Pan-American Exposition.

DIVISION VIII.

MINES AND METALLURGY.

GROUP 54—MINERAL COLLECTIONS.

CLASS 187—Minerals, Ores, Native Metals, Gems, Crystals and Geological Specimens.

COMMISSION OF CHILE. Santiago.

No. 1744—Collection of ores showing different samples of copper, silver, lead, gold, manganese ores of most of the mines in actual working, and salts, fossils and other non-metallic substances found in Chile. 900 samples. (Special catalogue.)

LATRILLE, Francisco.

No. 1745—Collection of gold, silver, copper, lead ores and other substances, principally from the northern part of the country, as well as some foreign samples. 1,000 samples. (Special catalogue.)

LAZO, T. Tadeo. Santiago.

No. 1746—Collection of samples of sea-shore sand from almost all important points of the Coast of Chile. (Special catalogue).

GROUP 55—MINING MACHINERY, TOOLS AND APPLIANCES.

CLASS 188—Underground Mining—Timber Cutting and Framing Machinery.

COMPANIA FERROCARRIL COPIAPO.

No. 1747—Double hand mining pump.

GROUP 56—MACHINERY FOR CRUSHING, PULVERIZING AND SMELTING.

CLASS 196—Rock Breakers, Rolls and Stamp-Motors.

COMPANIA FERROCARRIL DE COPIAPO.

No. 1748—White iron tire for grinding mill (Llanta para Trapiche).

No. 1749—White iron bottom plate for grinding mill (Solera para Trapiche).

No. 1750—Fine hand-grinding roller (Maray) and bottom plate for same.

No. 1751—Cams of stamp battery.

MINING EXHIBIT.

No. 1752—Tappets of stamp battery, 9 inches in diameter.
No. 1753—Heads of stamp battery, 9 inches in diameter.
No. 1754—Shoe of stamp battery, 9 inches in diameter.
No. 1755—Die of stamp battery, 9 inches in diameter.
No. 1756—Shoe of stamp battery, 8 inches in diameter.
No. 1757—Die of stamp battery, 8 inches in diameter.
No. 1758—Blake's crusher yaw-face, different sizes.

CLASS 198—Machinery and Appliances for the Extraction of Gold and Silver by Milling.

COMPANIA FERROCARRIL DE COPIAPO.

No. 1759—Lead pot, 5 feet in diameter.
No. 1760—Lead pot, 3 feet 6 inches in diameter.
No. 1761—Retort (Caperuza) and cover for same.
No. 1762—Bar silver mould, large size.
No. 1763—Bar silver mould, small size.
No. 1764—Bar silver mould (medium size).

GROUP 58—MACHINERY, TOOLS AND APPLIANCES USED IN MOVING, DELIVERING AND STORING ORES AND COAL.

CLASS 200—Tramways, Turn-Tables, Hoisting and Conveying Machinery.

COMPANIA FERROCARRIL DE COPIAPO.

No. 1765—Iron pieces of a complete horse whim.

GROUP 59—ORES AND METALLIC PRODUCTS.

CLASS 203—Metallurgy of Iron and Steel, Machinery, Methods and Appliances.

COMMISSION OF CHILE. Santiago. The Commission has tried to show the iron and manganese ores existing in Chile, in order to demonstrate the important deposits of these substances and their purity, thus showing the favorable conditions of the country for the manufacture of iron, steel and manganese iron.

No. 1766—Magnetic iron ore. "Agua Buena" mine, near Las Cardas on the railroad between Ovalle and Coquimbo. Very large deposits of this metal are being worked at present and is used as flux in smelting silver and copper ores.

Analysis:

Iron peroxide	96.00 per cent.
Silica	1.75 per cent.
Sulphur	—— per cent.
Phosphorus	0.04 per cent.
Silicates	2.20 per cent.

(About 67 per cent. of metallic iron.)

No. 1767—Magnetic iron ore. "Juan Soldado" mine, near Serena, Coquimbo. Found in large quantities in veins and loose lumps.

No. 1768—Iron and copper ores. "Tres Gracias" mine, Chanaral, Atacama. Worked for their copper contents.

No. 1769—Iron ore. "Tofo" mine, near Totoralillo Harbor. Very abundant deposits.

Analysis of these ores runs as follows:

Iron peroxide	96.00 per cent.
Water	0.20 per cent.
Volatile matter	1.50 per cent.
Insoluble and not determined	2.30 per cent.

(More or less, 67 per cent. metallic iron.)

No. 1770—Iron ore. "Tres Gracias" mine, Chañaral, Atacama. Deposits of this metal are situated near the copper mine of the same name.

No. 1771—Iron ore. "Dorado" mine, Coquimbo, Cerro del Tiuque. Large veins probably outcrops of copper veins and very abundant.

No. 1772—Manganese ore. "Canas" mine, near Marqueza, Elqui, Coquimbo.

Manganese peroxide	56.00 per cent.
Manganese protoxide	24.00 per cent.
Iron peroxide	0.60 per cent.
Silica	5.80 per cent.
Phosphorus	0.03 per cent.
Lime carbonate	9.00 per cent.
Insoluble and not determined	4.67 per cent.

No. 1773—Manganese ore. "Corral Quemado" mine, near Ovalle, Coquimbo. Very important and in actual working.

No. 1774—Iron ores. "Tarara" mine, Ojos de Agua, Coquimbo. Near a very important copper mine.

GODOI, Samuel.

No. 1775—Iron ores. "San Ambrosio" and "Vallenar" mines. It is estimated that there are 900,000 tons of ores visible in these mines. Vallenar, Atacama.

No. 1776—Manganese ores. "Elisa and Huasquina" mine, situated 20 miles from Huasco Harbor, Freirina, Atacama.

DAVISON, Guillermo. Chillan.

No. 1777—Manganese ore.

THOMAS, E. Santiago.

No. 1778—Manganese ore of Hospital.

JARA, P. A.

No. 1779—Manganese ore. "Mercedes and Rafael" mine. Buin, Santiago. Important deposits near the railroad line. Width of the vein from 2 to 2½ metres.

Manganese oxide	57.00 per cent.
Iron oxide	9.60 per cent.
Oxygen	7.85 per cent.
Phosphorus	0.00 per cent.
Silicon	6.00 per cent.
Lime	0.85 per cent.

SOCIEDAD INDUSTRIAL DE ATACAMA. Copiapó.

No. 1780—Iron ore. Near "Tierra Amarilla," Atacama. Used as flux in copper and silver smelting plants.

ABBOTT, Enrique, & SUCESION VALDES M. La Serena.

No. 1781—Manganese ores. "Chorros" mine, Coquimbo. Very little amount or no phosphorus. Abundant deposits are being worked at present. Ores average 50 per cent. metallic manganese. Recognized in a length of 2,000 metres with an average width of 1.50 metres. Large quantities of these ores are shipped to Europe and the United States every year.

GROUP 59—ORES AND METALLIC PRODUCTS.

CLASS 205—Metallurgy of Zinc, Nickel and Cobalt, with Methods of Concentration—Machinery and Appliances.

RODRIGUEZ, Enrique A.

No. 1782—Cobaltite. "Caprichosa" mine, Coquimbo. 12 per cent. cobalt. In a vein with copper sulphides. Width of the vein 2½ metres. New prospecting having reached only to a depth of 100 feet. The ores are exported to Europe.

ESPOZ, Jorje 2°. Copiapo.

No. 1783—Cobalt ore. "Elisa" mine in Matecitos. Depth 10 metres. 7.1 per cent. cobalt.

No. 1784—Cobalt ore. "Laura" mine, Matecitos, Copiapo, Atacama. Depth, 10 metres. 10 per cent. cobalt.

COMMISSION OF CHILE. Santiago.

No. 1785—Erythrite. Cobalt bloom. "Eva" mine, Copiapo, Atacama.

No. 1786—Cobaltite. "Anjela" mine, Copiapo, Atacama.

GONZALEZ, Jose Bruno. Santiago.

No. 1787—Cobalt ore. "La Restauradora" mine. 4 per cent. cobalt. Maipo, Santiago. New prospecting in an old closed-down mine.

No. 1788—Cobalt ore. "La Restauradora" mine, Maipo. 4 per cent., with iron oxide.

No. 1789—Copper and cobalt ores. "La Restauradora" mine, Maipo. 10 per cent. copper, 4 per cent. cobalt.

No. 1790—Cobaltiferous mispickel. "La Restauradora" mine, Maipo. 4 per cent. cobalt.

CLASS 206—Metallurgy of Copper—Machinery, Methods and Appliances.

HARNECKER, Otto. Ligua, Aconcagua. Owner of many important and well-developed mines. He has largely contributed to the introduction of blast smelting furnaces for the smelting of copper, and has, besides, made some improvements of his own in the shape of the furnaces, that have rendered them very appropriate for economically working the ores and is at present smelting them in a single operation and running as high as 50 per cent. copper. Experiments made by him have shown that it is possible to smelt in his furnaces ores running as low as 3 per cent. copper with economical success.

No. 1791—Model of a blast copper smelting furnace showing the shape in which it is operated in the smelting plant owned by Mr. Harnecker. Internal diameter 3 feet; smelting capacity in 24 hours, 23 metric tons.

No. 1792—Copper mattes. 50 per cent. copper obtained in the furnace shown in No. 1791 by a single operation.

No. 1793—Copper ores. "Maquis" mine, Ligua. 4 per cent. copper.

No. 1794—Copper ores. "Maquis" mine, Ligua. 5 per cent. copper.

No. 1795—Copper ores. "Maquis" mine, Ligua. 3 per cent. copper. These ores are formed into bricks before smelting.

No. 1796—Copper pyrites. "Guias" mine, Ligua. 3 per cent. copper. These ores are calcinated before smelting.

No. 1797—Oxidized copper ore. "Guias" mine, Ligua. 4 per cent. copper.

No. 1798—Oxidized copper ore. "Guias" mine, Ligua. 3½ per cent. copper.

No. 1799—Calcinated copper pyrites. 7 per cent. copper.

No. 1800—Oxidized copper ore. "San Lorenzo" mine, Ligua. 5 per cent. copper.

No. 1801—Copper pyrite. "Palqui" mine, Ligua. 7 per cent. copper.

No. 1802—Copper pyrite. "Carmen" mine, Ligua. 4½ per cent. copper.

No. 1803—Copper ore. "Carmen" mine, Ligua. 4 per cent. copper.

No. 1804—Chimney fumes. Condensed in chimney canals and formed into bricks for smelting. Contain 5 per cent. copper.

No. 1805—Lime carbonate. Used as flux in smelting.

SOCIEDAD INDUSTRIAL DE ATACAMA. Copiapo. This company owns over twenty important mines in the Department of Copiapo, Atacama Province, among which are the inexhaustible copper ore deposits of "Lautaro" and "Amolanas," a large body of ore running from 5 to 6 per cent of copper recognized to a length of many thousand metres and having a width of 25 metres. The working of this mine is conducted in form of quarries and the annual output is about 9,000 tons of ores. The ores are concentrated or dressed before smelting. The other mines that are represented by these samples in the exhibit are also large producers and promise much for the future.

The smelting plant owned by this company comprises a section for smelting copper and another for smelting silver and lead, and frequently mattes which have a high gold and silver grade are also obtained.

The number of furnaces is as follows: 8 reverberatory furnaces; 1 blast furnace for copper mattes smelting; 2 blast furnaces for gold, silver and lead smelting; 2 roasting furnaces; 2 copelating furnaces for silver; some small furnaces for refining silver and gold bars.

The annual production is as follows: Copper bars, 1,731 tons; silver and gold-bearing mattes, 226 tons; silver bars, 4,423 kilograms; silver and gold bars, 667, with 4 to 6 per cent. gold.

Photographs of some of these mines and of the smelting plant can be seen further on.

No. 1806—Oxidized copper ore (8.1 per cent. copper). "Carmen Alto" mine, Ojanco, Copiapo.

No. 1807—Oxidized copper ore (14.8 per cent. copper). "Pensamiento" mine, Punta del Cobre, Copiapo.

No. 1808—Oxidized copper ore (10.9 per cent. copper). "Esmeralda" mine, Punta del Cobre, Copiapo.

No. 1809—Copper pyrites (5.2 per cent copper). "Alcaparrosa" mine, Granate, Copiapo.

No. 1810—Oxidized copper ore (12.5 per cent. copper). "Cadena" mine, Punta del Cobre, Copiapo.

No. 1811—Oxidized copper ore (16.1 per cent. copper). "Buena Esperanza" mine, Punta del Cobre, Copiapo.

No. 1812—Oxidized copper ore (27.9 per cent. copper). "Andacollo" mine, Ojanco, Copiapó.

No. 1813—Oxidized copper ore (36.5 per cent. copper). "Bateas" mine, Punta del Cobre, Copiapó.

No. 1814—Oxidized copper ore (12.3 per cent. copper). "Abundancía" mine, Punta del Cobre, Copiapó.

No. 1815—Oxidized copper ore (12.6 per cent. copper). "Victoria" mine, Ojanco, Copiapó.

No. 1816—Oxidized copper ore (17.6 per cent. copper). "Esperanza" mine, Ojanco, Copiapó.

No. 1817—Oxidized copper ore (15.7 per cent. copper). "Transito" mine, Ojanco, Copiapó.

No. 1818—Oxidized copper ore (12.2 per cent. copper). "San Francisco" mine, Ojanco, Copiapó.

No. 1819—Copper pyrite (4.1 per cent. copper). "Puna" mine, Granate, Copiapó.

No. 1820—Copper pyrite (8.6 per cent. copper). "Santos" mine, Copiapó.

No. 1821—Copper pyrite (4 per cent. copper). "Coquimbana" mine, Ojanco Viejo, Copiapó.

No. 1822—Copper pyrite (14.3 per cent. copper). "Manto Verde" mine, Punta del Cobre, Copiapó.

No. 1823—Copper pyrite (9.1 per cent. copper). "Descubridora" mine, Checo, Copiapó.

No. 1824—Copper pyrite (4.7 per cent. copper). "Alcaparrosa" mine, Granate, Copiapó.

No. 1825—Oxidized copper ore (8.5 per cent. copper). "Santa Rosa" mine Pintados, Copiapó.

No. 1826—Copper pyrite (3.7 per cent. copper). "Santos" mine, Copiapó.

No. 1827—Copper pyrite (10.2 per cent. copper). "Desgracia" mine, Ojanco Viejo, Copiapó.

No. 1828—Copper ore (17.5 per cent. copper). Showing the general character of ores in the "Lautaro" mine, Amolanas, Copiapó.

No. 1829—Copper ore (17.5 per cent. copper). Hand picked ore from the "Lautaro" mine, Amolanas, Copiapó.

No. 1830—Copper ore (17.5 per cent. copper). Samples showing ore from the "Lautaro" mine, Amolanas, Copiapó, Atacama. Coarse concentrates obtained in the jigs.

No. 1831—Copper ore. First concentrates obtained in the jigs.

No. 1832—Copper ore. Second concentrates obtained in the jigs.

No. 1833—Copper ore. Third fine concentrates obtained in the jigs.

No. 1834—Quartz. Used in smelting furnaces for bottom coverings. (Insoluble matter 97.4 per cent.)

No. 1835—Limestone. Used in the smelting plant for building purposes and as flux. (Insoluble matter 0.8 per cent.)

No. 1836—Oxidized copper ore (17 per cent. copper). "Vegas de San Andres" mine, Copiapó, Atacama.

No. 1837—Oxidized copper ore (25.4 per cent. copper). "Delirio" mine, Tres Puntas, Copiapó, Atacama. Samples showing different kinds of copper, principally from the "Bateas" mine, averaging from 15 to 30 per cent. copper, and taken from a depth of 100 to 120 metres.

No. 1838—Copper matte. First smelting product, 50 per cent. copper, obtained in reverberatory furnaces.

No. 1839—Slack. Obtained in first smelting operation in reverberatory furnaces. (0.3 per cent. copper.)

No. 1840—Copper matte. Second smelting operation (65 per cent. copper).

No. 1841—Slack. Obtained in the second smelting operation (0.7 per cent copper).

No. 1842—Copper matte. Obtained in blast furnaces (45.7 per cent. copper).

No. 1843—Slack obtained in the blast furnace (0.3 per cent. copper).

No. 1844—Copper matte. Obtained in second smelting operations and calcinated. (68.3 per cent. copper.)

No. 1845—Refined copper bar (97.9 per cent copper).

No. 1846—Slack obtained in refinery of copper (8 per cent. copper).

BRUNO GONZALEZ, José. Santiago. With a view to putting up a new plant for copper smelting in the mineral district called "San José de Maipo," near Santiago, Mr. Gonzalez Julio, mining engineer, initiated a series of new prospecting, and opened some old mines that had been closed down, and has obtained very encouraging results. Veins varying between 0.60 to 1.50 metres have been recognized, and very valuable bodies of ores have been found, as will be seen by the following exhibits. In looking principally for copper ores, he also found some cobalt ores which, up to that time, had not called the attention of miners in that district. He found some cobalt ores running from 3 to 6 per cent. cobalt, as can be seen under Class 205 of this catalogue. A map of this mineral district showing different mines and all topographical details of the country is on exhibition, together with these ores. Prospecting being now properly advanced, it will not be long before a new smelting plant is built to work these ores.

No. 1847—Copper ores (7 per cent. copper). "La Poderosa" mine, Cajon de Maipo.

No. 1848—Copper ores (10 per cent. copper). "Los Piches" mine, Cajon de Maipo. Width of vein, 1.25 metres.

No. 1849—Copper ore (9 per cent. copper and some silver). "Los Cipreces" mine, Cajon de Maipo.

No. 1850—Copper and silver ores. "La Junta" mine, Cajon de Maipo.

No. 1851—Copper ore, with limestone pyrite and iron oxide. "Grande" mine, Cajon de Maipo. From 2 to 5 per cent. copper. Important deposits in form of a horizontal strata of 2 metres. This mine is being worked at present.

No. 1852—Copper ore (7 per cent. copper). "La Colorada" mine, Cajon de Maipo. These are very abundant deposits, and can be worked in the form of quarries.

No. 1853—Copper ores (15 per cent. copper). "La Verde" mine, Cajon de Maipo. In veins between lower grade ores.

No. 1854—Copper ore. "La Romana" mine, Cajon de Maipo.

BESA, Carlos. Santiago. The two following samples represent some hand picked ores from a vein which has been recognized in a length of more than 2,000 metres, having a width of from 2 to 10 metres, and averaging 3 per cent. copper, 6 per cent. lead and 12 to 16 ounces of silver per ton. Old workings have reached a depth of about 100 metres in this vein. This mine is worked at present only on a very small scale.

No. 1855—Copper, silver and lead ores. "Cristo" mine, San José de Maipo.

No. 1856—Lead and silver ore. "Cristo" mine, San José de Maipo.

ELGUIN, Señores. Santiago. Owners of a very productive mine that yields annually some 1500 metric tons of ore running as high as 18 per cent. copper. The samples exhibited represent these ores and country rock. The 130 metres in depth mine is not being worked at present in a very satisfactory manner, and only in the summer months is work done on a large scale, on account of the height at which it is situated in the mountains. During winter everything is covered with snow and but little work is done.

No. 1857—Chalcopyrite (Copper pyrites). "San Augustin" and "San Lorenzo" mines, Las Condes.

COMMISSION OF CHILE. Santiago. The Commission of Chile to the Pan-American Exposition has endeavored in each case where there was lack in the representation of the mineral resources of the country, to fill up the space by sending a special agent to collect the missing samples or buying them in order to complete, as far as possible, the exhibition of the minerals found in the country. This explains why in so many instances the Commission of Chile appears as the exhibitor.

No. 1858—Native copper and cuprite. "San Guillermo" mine, Tarapacá.

No. 1859—Atacamite (oxychloride of copper). "Protectora" mine, Chuquicamata, Antofagasta.

No. 1860—Atacamite (copper oxychloride). "Zaragosa" mine, Chuquicamata, Antofagasta.

No. 1861—Malachite (copper carbonate). "Esperanza" mine, Alicahue, Petorca.

No. 1862—Bornite (sulphide of copper and iron). "Arenillas" mine, Morado, Copiapó, Atacama.

No. 1863—Malachite (very rich in gold). "San Lorenzo" mine, Guanaco, Taltal, Antofagasta.

No. 1864—Bornite (sulphur of copper and iron, 18 per cent. copper). "San Antonio" mine, Lo Aguirre, Santiago.

No. 1865—Cuprite and malachite (copper oxide and copper carbonate). "Esploradora" mine, Illapel, Coquimbo.

No. 1866—Chalcocite and azurite (copper pyrite and copper carbonate). "Yegua Helada" mine, Aconcagua.

No. 1867—Malachite and cuprite (copper carbonate and copper oxide). "Africa" mine, Ratones, Aconcagua.

No. 1868—Atacamite (oxychloride of copper and cuprite). "Esploradora" mine, Juncal, Atacama.

No. 1869—Cuprite. "Rasala" mine, Morado, Atacama.

No. 1870—Cuprite and hematite. "Bella Vista" mine, Higuera, Coquimbo.

No. 1871—Crysocolla (copper silicate). "Bella Vista" mine, Higuera, Coquimbo.

No. 1872—Bornite (copper and iron sulphide). "Tres Hermanos" mine, Cantarito, Petorca, Aconcagua.

No. 1873—Chalcopyrite (copper pyrite). "Eliza" mine, Illapel, Aconcagua.

No. 1874—Malachite and chrysocolla. "Roma" mine, Morado, Atacama.

No. 1875—Malachite and crysocolla (carbonate and silicate of copper). "Descubridora" mine, El Pingo, Atacama.

No. 1876—Malachite (copper carbonate). "Agardot" mine, Morado, Atacama.

No. 1877—Crysocolla (copper solicate). "Verde" mine, San Marcos, Copiapó, Atacama. Depth from which the sample was taken 5 metres.

No. 1878—Grey copper ore. "Cobriza" mine, Sacramento, Copiapó, Atacama.

No. 1879—Copper ore (Malachite and copper oxide). "Picha" mine, Lechugas, Copiapo, Atacama. 38 per cent. copper, depth 80 metres; 27 per cent. copper, depth 75 metres; 42 per cent. copper, depth 75 metres.

No. 1880—Copper pyrites. "Rosario" mine, Portezuelo, Copiapó, Atacama.

No. 1881—Chalcopyrite (copper pyrite). "Merceditas" mine, Cerro Blanco, Caldera, Atacama.

No. 1882—Country rock of the "Merceditas" mine, Cerro Blanco, Caldera, Atacama.

No. 1883—Copper pyrite, impregnation on the country rock. "San Jose" mine, San Marcos, Copiapó, Atacama. Depth 30 metres.

No. 1884—Malachite (copper carbonate). "San Carlos" mine, Patacones, Copiapó, Atacama.

No. 1885—Malachite (copper carbonate). "Dejacion" mine, Patacones, Copiapó, Atacama.

No. 1886—Malachite (copper carbonate). "San Luis" mine, Patacones, Copiapó, Atacama.

No. 1887—Malachite (copper carbonate). "Chilena" mine, Patacones, Copiapó, Atacama.

No. 1888—Copper pyrite. "Arenilla" mine, Cerro Blanco, Copiapó, Atacama.

No. 1889—Copper pyrite. "Arsénico" mine, Arsenico, Copiapó, Atacama.

No. 1890—Copper pyrite (18 per cent. copper). "Coquimbana" mine, Cerro Blanco, Copiapó, Atacama.

No. 1891—Copper ore. "San Juan" mine, Cerro Blanco, Copiapó, Atacama.

No. 1892—Copper ore. "Carmen" mine, Cerro Blanco, Copiapó, Atacama.

No. 1893—Copper pyrite. "Puente" mine, Cerro Blanco, Copiapó, Atacama.

No. 1894—Oxidized copper ore. Silver and gold bearing (22 per cent. copper). Depth, 70 metres. "San Diego" mine, Desierto, Copiapó, Atacama.

No. 1895—Copper pyrite. "Elena" mine, Jesus Maria, Copiapó, Atacama.

No. 1896—Copper pyrite (10.2 per cent. copper). "Desgracia" mine, Ojauco Viejo, Copiapó, Atacama.

No. 1897—Oxidized copper. "Placeton" mine, Ladrillos, Copiapó, Atacama.

No. 1898—Malachite (copper carbonate). "Rosario" mine, Portezuelo, Copiapó, Atacama.

No. 1899—Crysocolla (copper silicate). "Sagasca" mine, Tarapacá.

No. 1900—Crysocolla and cuprite. "Diamantin" mine, Tarapacá.

No. 1901—Oxidized copper ore. "Tres Gracias" mine, Chañaral, Atacama.

No. 1902—Crysocolla and malachite. Huacazul, Antofagasta.

No. 1903—Atacamite and malaquite (copper oxychloride and copper carbonate). "Saturnina" mine, Portezuelo, Antofagasta.

No. 1904—Crysocolla, malachite and copper oxide. Portezuelo, Antofagasta. Width of vein, 2 metres, near the seashore and 15 miles from Antofagasta. Sample *A*, 10 per cent. copper; sample *B*, 20 per cent. copper, depth 20 metres; sample *C*, 23 per cent. copper, depth 20 metres; sample *D*, 10 to 20 per cent. copper, depth 20 metres; sample *E*, country rock.

No. 1905—Crysocolla and malaquite (35 per cent. copper). "Yessis" mine, Naguayan, Antofagasta.
No. 1906—Crysocolla and oxysulphide of copper. Catiña Tarapacá.
No. 1907—Chalcopyrite (copper pyrite). "Tres Gracias" mine, Chañaral, Atacama.
No. 1908—Atacamite and copper sulphide. Quetena, Antofagasta.
No. 1909—Bornite (copper and iron sulphide). "Peladeros" mine, Camisas, Petorca, Aconcagua.
No. 1910—Malachite and copper oxide. "El Encatrado" mine, Frutillar. Depth 12 metres.
No. 1911—Bornite. "Peladeros" mine, Camisas, Petorca, Aconcagua. Depth 200 metres, 40 per cent. copper.
No. 1912—Bornite (copper and iron sulphide). "Huallongo" mine, Huallongo, Petorca, Aconcagua. Depth 60 metres; width of vein 0.60 metres.
No. 1913—Malachite and copper oxide. "Delfina" mine, Bronce Petorca, Aconcagua. Width of vein 1.10 metres.
No. 1914—Malachite and bornite. "Rupanco" mine, Lepirco, Aconcagua. Width of vein 1 metre; depth 20 metres.
No. 1915—Atacamite and cuprite. "Penon" mine, Cerro Blanco, Atacama.
No. 1916—Malachite (copper carbonate). "San Ramon" mine, Ojanco, Atacama.
No. 1917—Atacamite, malachite and hematite. "Al fin Arreglada" mine, Morado, Atacama.
No. 1918—Chrysocolla (silicate of copper). "Estaca" mine, Algarrobo, Atacama.
No. 1919—Malachite. "Margarita" mine, Chañaral, Atacama.
No. 1920—Malachite and hematite. "Verdinegra" mine, Rosario, Atacama.
No. 1921—Atacamite and cuprite. "Fortuna" mine, Morado, Atacama.
No. 1922—Malachite and chrysocolla. "San Francisco" mine, Ojancos, Copiapó.
No. 1923—Malachite and chrysocolla. "Brillador" mine, El Cobre, Atacama.
No. 1924—Atacamite (oxychloride of copper). "Viscacha" mine, Cerro Blanco, Chañaral, Atacama.
No. 1925—Malachite copper carbonate. "Inesperada" mine, Algarrobo, Caldera.
No. 1926—Chrysocolla, malachite and gypsum. "Descubridora" mine, Morado, Atacama.
No. 1927—Malachite and cuprite. "Monte Cristo" mine, El Cobre, Atacama.
No. 1928—Atacamite and cuprite. "Dulcinea" mine, Puquios, Copiapó, Atacama.
No. 1929—Chalcacite (copper sulphide). "Panulcillo" mine, Coquimbo.
No. 1930—Malachite (copper carbonate). "Merceditas" mine, Ojancos Nuevo, Copiapó, Atacama.
No. 1931—Chalcocite and malachite. "Carmen Alto" mine, Punta del Cobre, Copiapó, Atacama.
No. 1932—Chalcocite and iron oxide. "Veta Viuda" mine, Algarrobo, Atacama.
No. 1933—Cuprite, chalcocite and malachite. "Manto de Ossa" mine, Algarrobo, Atacama.
No. 1934—Cuprite, chrysocolla and atacamite. "Catalma" mine, Algarrobo, Atacama.
No. 1935—Chrysocolla and malachite. "Lo Aguirre" mine, Santiago.
No. 1936—Chalcopyrite (copper pyrite). "Alegria" mine, Batuco, Santiago.
No. 1937—Chalcocite (sulphide of copper). "Cocinera" mine, Panulcillo, Coquimbo.

No. 1938—Cuprite (red copper ore). "Las Animas" mine, Atacama.
No. 1939—Cuprite and atacamite. "Diablo" mine, Paposo, Atacama.
No. 1940—Bornite and chalcopyrite. "Dominadora" mine, Ovalle, Coquimbo.
No. 1941—Bornite (copper and iron sulphide). "Rosario" mine, Tamaya, Coquimbo.
No. 1942—Chalcopyrite (copper pyrite). "Guias" mine, Tamaya, Coquimbo.
No. 1943—Cuprite and atacamite (red copper ore and oxychloride of copper). "Bella Esperanza" mine, Sierra Gorda, Antofagasta.
No. 1944—Chalcopyrite (copper pyrite). "Carlos Condell" mine, Sierra Gorda, Antofagasta.
No. 1945—Native copper. "Rebosadero" mine, Antofagasta.
No. 1946—Chalcopyrite and crystallized quartz. "Dulcinea" mine, Morado, Atacama.
No. 1947—Native copper. "San Bartolo" mine, Antofagasta.
No. 1948—Chalcopyrite and crystallized quartz. "Santos" mine, Punta del Cobre, Copiapó, Atacama.
No. 1949—Chalcopyrite (copper pyrite). "Mantos Verdes" mine, Punta del Cobre, Atacama.
No. 1950—Chalcopyrite and crystallized quartz. "Coquimbana" mine, Cerro Blanco, Atacama.
No. 1951—Chacolpyrite (copper pyrite). "Rosario" mine, Tamaya, Coquimbo,
No. 1952—Chacolpyrite (copper pyrite). "Dichosa" mine, Tamaya, Coquimbo.
No. 1953—Bornite (copper and iron sulphide). "Pique" mine, Tamaya, Coquimbo.
No. 1954—Cuprite (red copper ore). "Bronces" mine, Jarilla, Atacama.
No. 1955—Chalcopyrite (copper pyrite). "Panchita" mine, La Higuera, Coquimbo.
No. 1956—Chalcopyrite and chalcocite. Mocha, Tarapacá.
No. 1957—Copper and cobalt ore. Silicate of copper and arsenate of cobalt. Huantaca, Tarapacá.
No. 1958—Malachite and cuprite. Width of vein, 1 metre; depth, 30 metres. "Las Animas" mine, Petorca, Aconcagua.
No. 1959—Bornite and malachite. Depth, 20 metres. "Pije" mine, Lepirco, Petorca, Aconcagua.
No. 1960—Copper pyrite and coveline. 40 metres depth. "Sto. Tomás" mine, Cantarito, Petorca, Aconcagua.
No. 1961—Malachite and chalcocite. "Buitre" mine, Cantarito, Petorca, Aconcagua.
No. 1962—Chalcopyrite. Depth, 20 metres. "Abundancia" mine, Cantarito, Petorca, Aconcagua.
No. 1963—Bornite (copper and iron sulphide). "Cangallita" mine, Hierro, Petorca, Aconcagua.
No. 1964—Coveline and malachite. "Sta. Isabel" mine, Santa Isabel, Petorca, Aconcagua.
No. 1965—Carbonates, oxide and copperpyrite. "Los Hollos" mine, El Frutillar, Petorca, Aconcagua.
No. 1966—Coveline. "Rosario" mine, Pedernal, Petorca, Aconcagua.
No. 1967—Oxide, malachite and pyrite. "Chepon" mine, El Bronce, Petorca. Aconcagua.

No. 1968—Bornite and chalcopyrite. "España" mine, El Bronce, Petorca, Aconcagua.
No. 1969—Chalcopyrite. "Farrellon" mine, Alicahue, Petorca, Aconcagua. Depth, 81 metres.
No. 1970—Chalcopyrite and bornite. "Elena" mine, Petorca, Aconcagua.
No. 1971—Bornite. "Dichosa" mine. 70 metres in depth. Petorca, Aconcagua.
No. 1972—Malachite. "La Gruesa" mine. 35 metres in depth. Bronce, Petorca, Aconcagua.
No. 1973—Chalcite (copper sulphide). "Plomia" mine. 8 metres in depth. Cantarito, Petorca, Aconcagua.
No. 1974—Cuprite. "El Carmen" mine, Los Condores, Petorca, Aconcagua.
No. 1975—Copper pyrite. "Maria Luisa" mine, Petorca, Aconcagua.
No. 1976—Bornite. Petorca, Aconcagua.
No. 1977—Malachite and coveline. "Porvenir" mine, Cantarito, Petorca, Aconcagua.
No. 1978—Bornite. "Esperanza" mine, Pedernal, Petorca, Aconcagua.
No. 1979—Malachite, oxide and chalcopyrite. "Crespon" mine, Petorca, Aconcagua.
No. 1980—Chalcocite and malachite. "San Enrique" mine, El Bronce, Petorca, Aconcagua.
No. 1981—Cuprite (red copper ore). "Frutillar" mine, Cerro del Buitre, Petorca, Aconcagua.
No. 1982—Chalcocite. "Romero" mine, Nipi, Petorca, Aconcagua.
No. 1983—Copper silicates. "Tres Hermanos" mine, Cantarito, Petorca, Aconcagua.
No. 1984—Native copper. "Yerba Loca" mine, El Pedernal, Petorca, Aconcagua.
No. 1985—Chalcocite. "Compañía" mine, Camisa, Petorca, Aconcagua.
No. 1986—Copper pyrite. "Chepon" mine, Cantarito, Petorca, Aconcagua.
No. 1987—Malachite and chalcocite. "Deseada" mine, Bronce, Petorca, Aconcagua.
No. 1988—Chalcocite. "Esperanza" mine, Lepirco, Petorca, Aconcagua,
No. 1989—Chalcopyrite and blende. "Candelilla" mine, Bronco, Petorca, Aconcagua.
No. 1990—Malachite and cuprite. "Maquisito" mine, Alicahue, Petorca, Aconcagua.
No. 1991—Malachite and copper oxide. "El Panteon" mine, Petorca, Aconcagua.
No. 1992—Carbonate and chalcocite. "Maquis" mine, El Pedernal, Petorca, Aconcagua.
No. 1993—Silicate and bornite. "El Alto" mine, Petorca, Aconcagua.
No. 1994—Copper, gold and silver ore. Cachiyuyo, Atacama.
No. 1995—Cuprite and atacamite. "Descubridora" mine, Chuquicamata, Antofagasta.
No. 1996—Chalcopyrite (copper pyrite). "Alegria" mine, Batuco, Santiago.
No. 1997—Copper and silver ore. "Manto Valdivia," Ovalle, Coquimbo.
No. 1998—Cuprite and malachite. "Dichosa" mine, Morado, Copiapó, Atacama.
No. 1999—Bornite and chalcopyrite. "Dichosa" mine, Tamaya, Coquimbo.
No. 2000—Malachite and copper oxide. Chincolco, Aconcagua.
No. 2001—Native copper. Copiapó, Atacama. E. B.

No. 2002—Cuprite and atacamite. "Reventon" mine, Paposo, Antofagasta.
No 2003—Bornite. "Incienso" mine, Coquimbo.
No. 2004—Natural copper sulphate. Tarapacá.
No. 2005—Chalcopyrite (copper pyrite). "Bella Vista" mine, Carrizal Alto, Atacama.
No. 2006—Chalcopyrite. "Fortuna" mine, Las Condes, Santiago.
No. 2007—Bornite (copper and iron sulphide). "Incienso" mine, Coquimbo.
No. 2008—Chalcocite. "Descubridora" mine, Morado, Copiapó.
No. 2009—Malachite and atacamite. "Tres Gracias" mine, Chañaral, Copiapó. E. B.
No. 2010—Chalcopyrite. "Colorado" mine, Huasco, Atacama.
No. 2011—Cuprite (red copper oxide). "San Guillermo" mine, Catiña, Tarapacá.
No. 2012—Cuprite and atacamite. "Mandiola" mine, Checo-Chico, Copiapó, Atacama.
No. 2013—Copper oxide. "Capitana" mine, Animas, Atacama.
No. 2014—Copper oxide and sulphide. "Capitana" mine, Animas, Atacama.
No. 2015—Atacamite, malachite and gypsum. E. B.
No. 2016—Chalcocite, cuprite and malachite. "Viscachas" mine, Cerro Blanco, Copiapó.
No. 2017—Chalcopyrite. "Romero" mine, Petorca, Aconcagua.
No. 2018—Atacamite copper oxychloride. "Zaragosa" mine, Chuquicamata, Antofagasta.
No. 2019—Copper carbonate and bornite. "Purisima" mine, Elqui, Coquimbo.
No. 2020—Native copper in sandstone (70 per cent. copper). "San Bartolo," Antofagasta.
No. 2021—Chalcopyrite with turmaline. "Blanca" mine, Pedernal, Petorca, Aconcagua.

PIEDRA & CO. Caldera. Exhibit of a collection of different ore samples, country rock and gangues at various levels taken from seven important mines situated in the mineral district of Algarrobo, where the many difficulties encountered with on the road passing through a broad plain covered with loose sand, together with the lack of capital for the proper working of these mines, maintain the production on a very small scale, notwithstanding that the ores are very rich, and that they are found within a short distance of the sea-coast.

"Fortuna" mine, Algarrobo, Caldera:
No. 2022—Country rock.
No. 2023—Gangue of surface oxidized ore.
No. 2024—Malachite (copper carbonate). Depth 30 metres.
No. 2025—Oxidized ore and sulphides. Depth 70 metres.
No. 2026—Rock from near the vein.
No. 2027—Gangue of the sulphide ore.
No. 2028—Covelline and copper pyrite. Depth 75 metres.
No. 2029—Chalcocite. Depth 75 metres.
No. 2030—Chalcocite and oxide of copper.
No. 2031—Chalcocite and oxide of copper. Depth 70 metres.
No. 2032—Chalcopyrite (copper pyrite). Depth 70 metres.

"Caupolican" mine, Algarrobo, Caldera:
No. 2033—Country rock.
No. 2034—Rock from near the vein.

No. 2035—Gangue.
No. 2036—Ore sample. Depth 70 metres.
No. 2037—Ore sample. Depth 75 metres.
No. 2038—Ore sample. Depth 70 metres.
No. 2039—Ore sample. Depth 80 metres.
No. 2040—Ore sample. Depth 70 metres.
No. 2041—Ore sample. Depth 100 metres.
No. 2042—Ore sample. Depth 85 metres.
No. 2043—Ore sample. Depth 105 metres.
No. 2044—Ore sample. Depth 90 metres.

"Estaca" mine, Algarrobo, Caldera, Atacama:
No. 2045—Country rock.
No. 2046—Rock from near the vein.
No. 2047—Gangue.
No. 2048—Ore sample. Depth 59 metres.
No. 2049—Ore sample. Depth 130 metres.
No. 2050—Ore sample. Depth 140 metres.
No. 2051—Ore sample. Depth 145 metres.
No. 2052—Ore sample. Depth 160 metres.
No. 2053—Ore sample. Depth 160 metres.

"Emiliana" mine, Algarrobo, Caldera, Atacama:
No. 2054—Country rock.
No. 2055—Rock from near the vein.
No. 2056—Gangue.
No. 2057—Ore sample. Depth 80 metres.
No. 2058—Ore sample. Depth 120 metres.

"Descubridora" mine, Algarrobo, Caldera, Atacama:
No. 2059—Country rock.
No. 2060—Rock from near the vein.
No. 2061—Gangues of oxidized ores.
No. 2062—Oxidized copper ore. Depth 100 metres.
No. 2063—Oxidized copper ore. Depth 80 metres.
No. 2064—Oxidized copper ore. Depth 70 metres.
No. 2065—Copper pyrite. Depth 130 metres.
No. 2066—Copper pyrite. Depth 160 metres.
No. 2067—Copper pyrite. Depth 140 metres.
No. 2068—Copper pyrite. Depth 120 metres.
No. 2069—Copper pyrite. Depth 145 metres.
No. 2070—Copper pyrite. Depth 150 metres.

"Llancas" mine, Algarrobo, Caldera, Atacama:
No. 2071—Country rock.
No. 2072—Rock from near the vein.
No. 2073—Gangue.
No. 2074—Gangue with some ore.
No. 2075—Ore sample. Depth 80 metres.
No. 2076—Ore sample. Depth 40 metres.
No. 2077—Ore sample. Depth 50 metres.
No. 2078—Ore sample. Depth 60 metres.
No. 2079—Ore sample. Depth 110 metres.

"Bella Vista" mine, Roca, Caldera, Atacama :

No. 2080—Lime carbonate.

No. 2081—Ore sample. Depth 65 metres.

No. 2082—Ore sample. Depth 40 metres.

MORENO, Honorio, and ALARCON, Anselmo. Taltal. These gentlemen are owners of two important mines, whose ores are shown in the following list of samples. The samples represent the different ores found at various levels as indicated in the specifications. The vein which is being worked in these mines is recognized for a long distance, averaging a width of 2 metres, workings here having reached as far as 130 metres in depth. The country rock is formed by a porphire, and the production of these mines is more or less 2,000 metric tons per year.

"Esperanza" mine, Taltal, Antofagasta :

No. 2083—Oxidized copper ore (30 per cent. copper). Depth 10 metres.

No. 2084—Copper pyrites (5 per cent. copper). Depth 80 metres.

No. 2085—Copper pyrite (8 per cent. copper). Depth 85 metres.

No. 2086—Copper pyrite (15 per cent. copper). Depth 110 metres.

No. 2087—Cuprite, copper oxide (30 per cent. copper). Depth 115 metres.

No. 2088—Covelline, copper sulphide (45 per cent. copper). Depth 115 metres.

No. 2089—Chalcocite, copper sulphide (50 per cent. copper). Depth 115 metres.

No. 2090—Covelline (10 per cent. copper). Depth 90 metres.

No. 2091—Country rock. Depth 90 metres.

No. 2092—Chacolpyrite, copper pyrite (15 per cent. copper). Depth 95 metres.

No. 2093—Chalcolpyrite, copper pyrite (18 per cent. copper). Depth 85 metres.

No. 2094—Covelline, copper sulphide (45 per cent. copper). Depth 90 metres.

No. 2095—Chalcopyrite and covelline (30 per cent. copper). Depth 100 metres.

No. 2096—Covelline with pyrite (40 per cent. copper). Depth 95 metres.

"Progreso" mine, Taltal, Antofagasta.

No. 2097—Malachite, copper carbonate (32 per cent. copper). Depth 8 metres.

No. 2098—Malachite, copper carbonate (26 per cent. copper). Depth 15 metres.

No. 2099—Malachite (30 per cent. copper). Depth 18 metres.

No. 2100—Cuprite and iron oxide (30 per cent. copper). Depth 20 metres.

FRANKLIN, Bustos. Valparaiso.

No. 2101—Bornite (copper and iron sulphide). "Santa Elena" mine, Peñon, Ligua, Aconcagua. Two samples of the same ore. This mine is being worked at present, after having been closed down for some time. The width of the vein reaches 2½ metres in certain spots. The samples exhibited are taken from a depth of 17 metres.

PINOCHET, Rodolfo. Santiago. Owner of the "Vieja" mine, Lo Espejo, about 8 miles from Santiago. The mine has been worked on a large scale for some time past and has reached a depth of 150 metres. There are three different veins, with an average width of 2 metres each. These veins are recognized as running horizontally for more than 300 metres. The upper beds are very abundant in oxidized copper ores averaging from 7 to 8 per cent. copper, and in the lower levels sulphides are to be found, as can be seen by the samples of chalcocite and bornite.

No. 2102—Samples of oxidized copper ore from 7 to 8 per cent. copper, and very abundant. Depth 15 metres.

No. 2103—Oxidized copper ore. Main vein.

No. 2104—Bornite and chalcocite.

No. 2105—Samples of sulphides found in the lower levels.

TUPPER, Felipe. Santiago.

No. 2106—Copper and silver ore. This ore represents an average of 60,000 tons contained in the dumps of the important mine "Desengaño," Batuco, Santiago. The average copper in these dumps is 3 per cent. and 8 ounces of silver per ton. This mine, which is closed at present, was worked for over 20 years and has yielded some $3,000,000. In 1892 work was stopped in this mine and has been closed since after reaching a depth of 220 metres. High grade ore has been found very abundantly in certain spots of the vein, 30 per cent. ore and 270 ounces of silver per ton. The vein has reached a width of 14 metres at certain points.

TORMINI, B. Caldera.

No. 2107—Oxidized copper ore (18 per cent. copper). Depth 75 metres. "Carmen Alto" mine, Morado, Copiapó, Atacama.

No. 2108—Copper pyrite (18 per cent. copper). Depth 110 metres. "Carmen Alto" mine, Morado, Copiapó, Atacama.

No. 2109—Copper pyrites. "Primavera" mine, Morado, Copiapó, Atacama.

No. 2110—Cuprite and iron oxide (30 per cent. copper). Depth 105 metres. "Fortuna" mine, Morado, Atacama.

SUCESION BARTH. Copiapó.

No. 2111—Copper pyrite and hematite (18 per cent. copper). Depth 120 metres. "Cortada" mine, Morado. Copiapo.

GACITUA, José M. Puquios, Copiapó.

No. 2112—Copper sulphide (10 per cent. copper). Depth 10 metres. "Buitre" mine, Puquios, Copiapó.

SUCESION CALDERON. Copiapó.

No. 2113—Copper ore. "Manto Verde" mine, Punta del Cobre, Copiapó. 20 per cent. copper, depth 10 metres; 12 per cent. copper, depth 100 metres; 12 per cent. copper, depth 100 metres; 8 per cent. copper, depth 150 metres (copper pyrite).

No. 2114—Copper pyrites. "Manto Verde" mine, Punta del Cobre. Depth 150 metres, 18 per cent. copper.

GONZALEZ, Adolfo. Caldera.

No. 2115—Copper pyrite. "Consuelo" mine, Punta de Médano, Caldera. 1 metre in width, 15 per cent. copper.

MONARDES, Juan. Copiapó.

No. 2116—Oxidized copper ores. "Rebelde" mine, Morado, Copiapó. Depth 10 metres, 14 per cent. copper.

SUCESION SAVALA.

No. 2117—Oxidized copper ores. "Zorraquina" mine, Chañarcillito, Copiapó. Depth 70 metres, 30 per cent. copper.

SHARPE, Jorje. Valparaiso.

No. 2118—Copper pyrites. "San Jorje" mine, Punta del Cobre, Copiapo. Depth 135 metres, 27 per cent. copper.

PAULSEN, Rodolfo. Copiapó.

No. 2119—Copper pyrites. "Elisa" mine, Ladrillos, Copiapó. 35 per cent. copper.

DOMEYKO, C. & Co. Copiapó.

No. 2120—Oxidized copper ore. "Malta" mine, Copiapó.

TOLEDO, Gumersindo.

No. 2121—Copper silicate (16 per cent. copper). Depth 114 metres. "Descubridora" mine, Galleguillos, Copiapó.

ALVAREZ, A. Copiapó.

No. 2122—Malachite and pyrites (20 per cent. copper). Depth 40 metres. "Margarita" mine, Cachiyuyo de Llampos, Copiapó.

THE COPIAPO MINING COMPANY. Copiapó. The exhibit made by this company consists of samples of copper ore from six of its most important mines. This English company began work in 1835. The price per share then was £1; to-day they are worth as much as £10, and the company possesses the most productive mine in the country, namely, "Dulcinea" mine, Puquios. This mine is worked on a vein from 1 to 8 metres in width and the ores extracted average from 15 to 20 per cent. copper.

During the last year the output reached 120 tons of ore per day. With proper working and development, the mine may maintain these figures for many years, the depth of the mine having reached about 900 yards. Provided with hoisting engines and worked in a scientific manner, this mine continues to be the best developed and most productive in the country. This mine shows to what an extent the working of mines can be conducted in the country by a conscious management and free investment of capital.

The other mines that are owned by this same company are not so well developed as the one we have spoken of, but they are all very important and promise much for the future.

"Dulcinea" mine, Puquios, Copiapó. Country rock, Andesyte.

No. 2123—Copper pyrites (28 per cent. copper). Depth 2,040 feet.
No. 2124—Copper pyrites (28 per cent. copper). Depth 2,220 feet.
No. 2125—Copper pyrites (28 per cent. copper). Depth 2,280 feet.
No. 2126—Copper pyrites (25 per cent. copper). Depth 1,680 feet.
No. 2127—Copper glance (55 per cent. copper). Depth 1,020 feet.
No. 2128—Copper pyrites (24 per cent. copper). Depth 1800 feet.

"Republicana" mine, Puquios, Copiapó. Country rock, Andesyte.

No. 2129—Copper carbonate (15 per cent. copper). Depth 145 feet.
No. 2130—Copper glance (40 per cent. copper). Depth 150 feet.
No. 2131—Copper glance and carbonate (30 per cent. copper). Depth 180 feet.
No. 2132—Atacamite, copper oxychloride (24 per cent. copper). Depth 150 feet.
No. 2133—Carbonate and copper glance (45 per cent. copper). Depth 250 feet.
No. 2134—Carbonate of copper (35 per cent. copper). Depth 300 feet.

"Descubridora" mine, Checo, Copiapó. Country rock, Porphyry.

No. 2135—Tetrahedrit, grey copper ores (40 per cent. copper). Depth 480 feet.
No. 2136—Bornite, copper and iron sulphide (30 per cent. copper). Depth 360 feet.
No. 2137—Bornite and pyrite (28 per cent. copper). Depth 420 feet.

"San Francisco" mine, Ojancos, Copiapó. Country rock, Granitic.

No. 2138—Copper carbonate (15 per cent. copper). Depth 125 feet.
No. 2139—Copper carbonate and glance (25 per cent. copper). Depth 330 feet.
No. 2140—Red copper oxide (35 per cent. copper). Depth 900 feet.
No. 2141—Carbonate of copper (27 per cent. copper). Depth 445 feet.
No. 2142—Copper glance (20 per cent. copper). Depth 600 feet.
No. 2143—Red oxide (30 per cent. copper). Depth 930 feet.
No. 2144—Red oxide and native copper (35 per cent. copper). Depth 950 feet.
No. 2145—Carbonate and red oxide (35 per cent. copper). Depth 750 feet.
No. 2146—Red oxide (60 per cent. copper). Depth 800 feet.

"Antonia" mine, Ojancos, Copiapó. Country rock, Granitic.

No. 2147—Carbonate and glance (35 per cent. copper). Depth 120 feet.
No. 2148—Carbonate and red oxide (40 per cent. copper). Depth 120 feet.
No. 2149—Carbonate and glance (60 per cent. copper). Depth 120 feet.
No. 2150—Carbonate (15 per cent. copper). Depth 120 feet.

"Carmen Alto" mine, Ojanco, Copiapó.

No. 2151—Carbonate of copper (15 per cent. copper). Depth 150 feet.
No. 2152—Carbonate of copper (12 per cent. copper). Depth 120 feet.
No. 2153—Carbonate of copper (16 per cent. copper). Depth 270 feet.
No. 2154—Carbonate of copper (28 per cent. copper). Depth 270 feet.
No. 2155—Carbonate of copper (14 per cent. copper). Depth 135 feet.
No. 2156—Carbonate of copper (10 per cent. copper). Depth 125 feet.
No. 2157—Glance (55 per cent. copper). Depth 300 feet.
No. 2158—Carbonate of copper (14 per cent. copper). Depth 450 feet.
No. 2159—Carbonate of copper (13 per cent. copper). Depth 580 feet.
No. 2160—Carbonate of copper (35 per cent. copper). Depth 150 feet.

PIEDRA, Hermanos, Caldera. The following samples show the ores of the "Explotadora" mine, situated 130 miles from Pan de Azucar harbor, at the foot of the Encantada range. This mine was discovered and worked during 1865. A plant for the reduction of the ores was constructed at Pan de Azucar. The long road measuring 130 miles and passing through deserted regions covered with sand, causes high freight charges for ores, so that only the ores that average from 20 per cent. copper and up are worked, and the lack of sufficient capital for developing the mine are the causes for its being closed down at present. The mine is made up of three different parallel veins, which in many instances form one single body of ore about 8 metres wide. These veins are recognized for more than 3,000 feet. The dumps of this mine are estimated at 70,000 metric tons, averaging from 7 to 8 per cent. copper and some silver. Both the great distance to the sea-coast and the lack of capital do not permit of its being worked on a larger scale, notwithstanding that it would be an easy matter to build a railroad from Agua Verde, where a junction can be made with the Taltal railroad. The cost of such a railroad is estimated at 150,000 dollars in gold. It can safely be asserted that with this advantage the mine would soon become one of the richest in the country. The mine has been worked to a depth of 100 metres, and large bodies of rich ores have been discovered.

No. 2161—Chalcopyrite and bornite (copper pyrites). Depth 150 metres.
No. 2162—Cuprite (red copper ore). Depth 80 metres.
No. 2163—Chalcopyrite.
No. 2164—Cuprite (red copper ores). Depth 100 metres.
No. 2165—Chalcopyrite and bornite. Depth 150 metres.

No. 2166—Native copper.
No. 2167—Malachite (copper carbonate). Depth 80 metres.
No. 2168—Malachite and cuprite.
No. 2169—Copper pyrites. Depth 125 metres.
No. 2170—Malachite and cuprite. Depth 40 metres.
No. 2171—Cuprite (copper oxide and malachite). Depth 80 metres.
No. 2172—Cuprite and malachite.

HERNANDEZ, Lino & Co. La Serena.

No. 2173—Oxidized copper ore (3 to 4 per cent. copper). Width of vein 10 metres. "Arrayan" mine, Andacollo, Coquimbo.

FERNANDEZ, Varas P. La Serena.

No. 2174—Oxidized copper ore (4 per cent. copper). "Riconada" mine, La Serena.

ORTIZ & GODOI. La Higuera.

No. 2175—Oxidized copper ore (25 to 28 per cent. copper). Depth 70 metres. "Flor de Maria" mine, La Higuera, Coquimbo.
No. 2176—Copper pyrites from the same mine.

COMPAÑIA DE COBRE DE ANDACOLLO. Valparaiso.

No. 2177—Copper oxides (18 to 20 per cent. copper). Depth 40 metres. "Perlita" mine, Andacollo, Coquimbo.
No. 2178—Copper oxides (55 per cent. copper). Depth 25 metres. "San Lorenzo" mine, Andacollo, Coquimbo.

SUCESION ZORRILLA. La Serena.

No. 2179—Cuprite and copper oxide (40 per cent. copper). Depth 45 metres. "Cachiyuyo" mine, Cachiyuyo, Coquimbo.

HIDALGO VIDELA, Carlos. La Serena.

No. 2180—Malachite (16 per cent. copper). Depth 50 metres. "San Carlos" mine, Cachiyuyito, Coquimbo.

CENTRAL CHILE COPPER COMPANY. Coquimbo.

No. 2181—Copper mattes. Panulcillo, Ovalle. Three blast furnaces, one of them from Fraser & Chalmers, with water-jacket; 3 reverberatory furnaces and 3 reverberatory roasting furnaces. Smelting is only for mattes of 50 per cent. copper, which in 1900 amounted to 2,820 metric tons of mattes, containing 48 per cent. copper, equal to 40,650 metric tons of ores, with 5.5 per cent. of copper.
No. 2182—Copper pyrite (4 per cent. copper). Depth 80 metres; width of the lode 13 to 15 metres. "Panulcillo Alto" mine, Panulcillo, Ovalle.
No. 2183—Oxidized copper ore (17 per cent. copper). Depth 40 metres. "Panulcillo Alto" mine, Panulcillo, Ovalle.
No. 2184—Oxidized copper ore (20 per cent. copper). Depth 20 metres. "Panulcillo Alto" mine, Panuncillo, Ovalle.
No. 2185—Oxidized copper ore and gypsum (7 to 8 per cent. copper). Depth 40 metres. "Panulcillo Alto" mine, Panulcillo, Ovalle.

MINING EXHIBIT.

ZEPEDA, Antonio. Coquimbo.

No. 2186—Chalcocite, copper sulphide (60 per cent. copper). Depth 50 metres. "El Cobre" mine, San Lorenzo, Coquimbo.

MADARRIAGA, Brudecindo. Coquimbo.

No. 2187—Chalcocite, copper sulphide (40 per cent. copper). Depth 5 metres. "Florida" mine, Tinajas, Coquimbo.

No. 2188—Oxidized copper ore (25 per cent. copper). Depth 10 metres. "Farellon" mine, Potrerillo Alto mineral district.

LAMBERT, Carlos J., Sucesion de. La Serena. Brillador mineral district, Serena, Coquimbo.

No. 2189—Bornite and chalcopyrite. The ore averages from 9 to 10 per cent. copper. Width of vein 5 metres, depth from 250 to 300 metres.

No. 2190—Oxidized copper ores, with an average of from 6 to 7 per cent. copper. Depth 60 metres; width of vein 5 metres.

No. 2191—Copper bars from "La Compañia" copper smelting plant, Serena City. Five reverberatory furnaces for mattes and copper bars, and 2 reverberatory roasting furnaces. The annual output of copper bars (96 per cent. copper) is from 900 to 1,000 metric tons.

No. 2192—Copper sulphate, manufactured at "La Compañia" plant (24 per cent. copper). Monthly output 20 metric tons.

SOCIEDAD MINERA SERENA. La Serena. "La Higuera" mineral district. Serena. "Llanca" mine.

No. 2193—Oxidized copper ore. Depth 40 metres; width 1.50 metres. Average, 12 per cent. copper.

No. 2194—Covellite. Depth 80 metres; width of vein 2 metres. Average, 20 per cent. copper.

No. 2195—Chalcopyrite. "Llanquita" mine. Depth 150 metres; width of vein 1.50 metres. Average, 14 per cent. copper.

MUÑOZ, Juan, Sucesion de. La Serena. "La Higuera" mineral district, Serena.

No. 2196—Oxidized copper ores. Width of 4 parallel veins, 4 metres; 18 per cent. copper. "Arenillas" mine.

No. 2197—Covellite. "Arenillas" mine; 25 per cent. copper; depth 60 metres; width 2 metres.

No. 2198—Chalcopyrite. "Casas" mine; depth 166 metres; width 1 metre; 10 per cent. copper.

The ores of these mines are smelted into mattes in three reverberatory furnaces; the average smelting being 90 metric tons per month; 48 per cent. copper.

These mines have been worked very extensively, and have a well-equipped plant of hoisting machines with 2 steam engines of 40 H. P. and four boilers, as well as an excellent electric lighting plant. A telephone is in operation inside the mines and communicates them with the general offices of the company. "Siemes & Halske" electric drills are being installed at present. The veins, which are very powerful and are 10 to 12 metres wide in certain places, averaging from 15 to 20 per cent. copper, have been worked 220 metres in a vertical direction and 1,350 metres horizontal. At present there are 250 employees and workmen occupied in these mines. "La Higuera" is one of the most important copper mineral districts of Coquimbo.

OSORIO DIAZ, Enrique.

No. 2199—Chalcocite. "Mina Grande" mineral district, Purísima; depth 60 metres.

SOCIEDAD MINERA "LA COQUIMBANA." La Serena. "Corcobado" mineral district. "Coquimbana" mine.

No. 2200—Oxidided copper ores; depth 142 metres.
No. 2201—Cuprite; depth 180 metres.
No. 2202—Chalcopyrite; depth 200 metres.
No. 2203—Chalcopyrite; depth 214 metres.

SOCIEDAD CHILENA DE FUNDICIONES. Valparaiso.

GUAYACAN AND TONGOI COPPER SMELTING PLANTS.

Guayacan is one of the largest copper smelting plants of Chile, and is situated about a mile from the port of Coquimbo. This plant being located in the vicinity of a bay and having good transportation facilities by sea from Cobija, on the north, and Valparaiso, on the south, is easily provided with large quantities of copper ore. The ores are smelted into copper bars and ingots at Guayacan and Tongoi and these are exported.

This company owns small steamers and sailing vessels for the transportation of ores from the different coast regions to the copper smelting plants, and are besides utilized to carry the necessary coal for feeding the furnaces from the Lebu coal mines (Arauco), belonging to the same company. The company also owns a small copper smelting plant in the port of Tongoi, south of Guayacan, and is connected by railway to the important copper mineral district of Tamaya. The Guayacan plant has 15 reverberatory smelting furnaces and 20 reverberatory roasting furnaces; 5 different steam engines with a total capacity of 50 H. P., crushers, pulverizing cylinders, donkeys, Chile mills, machines and an engine shop and dynamo for the electric lighting of the entire plant.

The average grade of the ores and mattes smelted in 1900 was 30 per cent. copper, which, on being reduced to copper bars of 96 per cent., gave 4,200 metric tons of ingots and wire-bars; 99.8 per cent. copper.

Gold and silver ores are smelted into copper mattes of 40 per cent. copper, 150 grams of gold per ton and 350 ounces silver.

The total number of employees and workmen amounts to 270.

No. 2204—Oxidized copper ores (18 per cent. copper). Cobija, Antofagasta.
No. 2205—Bornite (22 per cent. copper). Cobija, Antofagasta.
No. 2206—Copper carbonates (19 per cent. copper). Samo Alto, Coquimbo.
No. 2207—Oxidized copper ores (18 per cent. copper). Cabildo, Aconcagua.
No. 2208—Oxidized copper ores (10 per cent. copper). Samo Alto, Coquimbo.
No. 2209—Oxidized copper ores (8.5 per cent. copper). Ligua, Aconcagua.
No. 2210—Copper pyrites (10 per cent. copper). Antofagasta.
No. 2211—Chalcopyrites (20 per cent. copper). Quillota, Valparaiso.
No. 2212—Chalcopyrites (15 per cent. copper). Tambillos, Coquimbo.
No. 2213—Oxidized copper ores (5 per cent. copper). Las Cardas, Coquimbo.
No. 2214—Oxidized copper ores (7 per cent. copper). Ovalle, Coquimbo.
No. 2215—Oxidized copper ores (9 per cent. copper). Cobija, Antofagasta.

No. 2216—Copper and iron pyrites (6 per cent. copper). Tambillos, Coquimbo.
No. 2217—Oxidized copper ores (15 per cent. copper). Marquesa, Coquimbo.
No. 2218—Cemented copper (70 per cent. copper). Andacollo, Coquimbo.
No. 2219—Oxidized copper ores (13 per cent. copper). Morado, Atacama.
No. 2220—Oxidized copper ores (12 per cent. copper). Punitaqui, Coquimbo.
No. 2221—Chalcopyrite (18 per cent. copper). Elqui, Coquimbo.
No. 2222—Chalcocite (25 per cent. copper). Talcuna, Coquimbo.
No. 2223—Copper pyrites (7 per cent. copper). Agua de Pangue, Coquimbo.
No. 2224—Copper oxides (16 per cent. copper). Taltal, Antofagasta.
No. 2225—Copper oxides (15 per cent. copper). Cobija, Antofagasta.
No. 2226—Slags (0.5 per cent.). Guayacan, Coquimbo.
No. 2227—Mattes (48 per cent. copper). La Higuera, Coquimbo.
No. 2228—Mattes (50 per cent. copper). Panulcillo, Coquimbo.
No. 2229—Mattes (48 per cent. copper). Cabildo, Coquimbo.
No. 2230—Mattes (70 per cent. copper). Guayacan, Coquimbo.
No. 2231—Copper shots for coining (100 per cent. copper). Guayacan, Coquimbo.
No. 2232—Copper bars (97 per cent. copper). Guayacan, Coquimbo.
No. 2233—Copper ingot (99.8 per cent. copper). Guayacan, Coquimbo.
No. 2234—Copper wire-bar (99.8 per cent. copper). Guayacan, Coquimbo.

BEGMALENARIE & CO. Iquique.

No. 2235—Chalcopyrite with quartz. "San Juan" mine, Mocha, Iquique, Tarapacá.

CERVERÓ, Sucesión. Cabildo. Owners of a great number of mines in Petorca which they are developing at present as much as their capital permits them to, and they now have a smelting plant with two furnaces for the concentration of ores into mattes of 50 per cent. copper, which are either sold to larger plants or exported to Europe. They not only smelt the ores from their own mines, but they also buy ores from other mines for smelting purposes, and in this manner they have sufficient material on hand to keep the furnaces going during the whole year without interruptions.

The following samples will show some of the ores extracted from these mines:

No. 2236—Carbonate and silicate of copper; 10 metres in depth. "Soberana" mine, Petorca, Aconcagua.

No. 2237—Malachite (copper carbonate); depth 10 metres. "Chancleta" mine, El Cobre, Petorca, Aconcagua.

No. 2238—Malachite and cuprite; depth 5 metres. "Maria Cristina" mine, El Cobre, Petorca, Aconcagua.

No. 2239—Copper pyrite. "Maquis" mine, Petorca, Aconcagua.

No. 2240—Oxide, copper and pyrite; depth 40 metres. "San Javier" mine, Petorca, Aconcagua.

No. 2241—Chalcocite (copper sulphide). "Ñipa," Petorca, Aconcagua.

No. 2242—Copper pyrite and bornite; depth 150 metres. "Loreto" mine, Ñipa, Petorca, Aconcagua.

No. 2243—Malaquite and chalcocite. "Quebradita" mine, Petorca, Aconcagua.

No. 2244—Copper pyrite; depth 30 metres. "Castillo" mine, Ñipa, Petorca, Aconcagua.

VILLEGAS, Enrique. Santiago. Owner of some mines in the important district of Chuquicamata, in which the greatest quantity of atacamite in the world is found. It is predicted that this will be one of the most productive mineral districts in the country.

No. 2245—Atacamite and copper sulphide (28 per cent. copper). "Poderosa" mine, Chuquicamata, Antofagasta.

No. 2246—Atacamite. "San Felipe" mine, Chuquicamata, Antofagasta.

No. 2247—Concentrated atacamite (25 per cent. copper). "Poderosa" mine, Chuquicamata, Antofagasta.

No. 2248—Atacamite. Chuquicamata, Antofagasta.

No. 2249—Krönckite (sulphate of soda and copper). Chuquicamata, Antofagasta.

COMPAÑIA EXPLOTADORA DE LOTA Y CORONEL. Valparaiso. Both the development of the coal mines owned by this company, and the employment of low price coal at the place of production, have given birth to the most important manufacturing center in Chile. This company owns several branch plants, the principal one of which is the copper smelting plant situated in Lota harbor, near the sea-shore, at the foot of the coal mines. The plant consists of:

Four reverberatory furnaces for the concentration of ores that are mixed with a small quantity of copper mattes which are bought from the smaller smelting plants throughout the country, the mattes being about 50 per cent. copper.

Two convertors which are used constantly, and many others which are being repaired.

One steam-engine of 200 H. P. for the air-compressors used in the convertors.

Eight reverberatory furnaces for the smelting of mattes for the old system of treatment in reducing and refining.

Two reverberatory furnaces for the refinery of copper bars and ingots.

Ten reverberatory calcinating furnaces.

One blast furnace for recovering copper out of the convertor's slag.

The yearly output of this plant amounts to 4,200 metric tons of copper bars of 96 per cent. copper, and 4,200 metric tons of copper ingots of 99.9 per cent. copper. The number of workmen employed at this plant is 400.

The ores reduced in this plant are brought from all parts of the country, as the company itself does not own any copper mines. The ores are shipped to Lota on board the company's steamers. The average grade of the ores smelted in this plant is from 12 to 14 per cent. copper.

This same company owns a glass factory in Lota, two plants for the manufacture of bricks and earthenware, and the most productive coal mines of the country.

Exhibits from these different plants can be seen in another part of this catalogue.

No. 2250—Copper bars (96 per cent. copper). Annual output 4,200 metric tons.

No. 2251—Copper ingots (99.9 per cent. copper). Annual output 4,200 metric tons.

MORONI, Eujenio.

No. 2252—Malachite and copper oxide with hematite; width of vein 1.20 metres; depth 15 metres; 11 per cent. copper. *a*. Depth 75 metres; 12 per cent. copper. *b*. Depth 10 metres; 10 per cent. copper. *c*. Depth 8 metres; 9 per cent. copper.

DEVESCOVI, Pedro. Iquique.

No. 2253—Carbonate and oxide of copper (36 per cent. copper). "Anita" mine, Collahuasi, Taracapá.

No. 2254—Silicate and oxide of copper (28 per cent. copper). "Esperanza" mine, Collahuasi, Taracapá.

No. 2255—Silicate and oxide of copper. "San Nicolas" mine, Tarapacá.

PIZARRO, E. Manuel. Copiapó.

No. 2256—Chacolpyrite with quartz (12 per cent. copper). Depth 40 metres. "Bella Vista" mine, Granate, Copiapó.

ROJAS R., David. Copiapó.

No. 2257—Oxide and carbonate of copper (10 per cent. copper). Depth 40 metres. "Buena Esperanza" mine, Punta del Cobre, Copiapó.

No. 2258—Grey copper ore (30 per cent. copper). "Buena Esperanza" mine, Punta del Cobre, Copiapó, Atacama.

No. 2259—Chalcocite and oxide of copper (50 per cent. copper). "Buena Esperanza" mine, Punta del Cobre, Copiapó, Atacama.

No. 2260—Malachite and copper oxide. Depth 80 metres. Copiapó, Atacama.

DEVESCOVI & CO. Iquique.

No. 2261—Copper silicate. Sagasca, Tarapaca.

CACERES, Basilio. Chañaral, Atacama. Owner of a very important mine called "Tres Gracias" in Chañaral, Atacama. This mine is very abundant in ores of from 7 to 10 per cent. copper, and is made up of iron oxides and of oxidized specimens of copper ores. The following samples will show the kind of ore extracted:

No. 2262—Copper carbonates.

No. 2263—Copper pyrite, found recently in lower levels.

No. 2264—Copper ores from the dumps of the mine.

VAZQUEZ, J. Antofagasta.

No. 2265—Cuprite, carbonate and silicate of copper. "San Cayetano" mine, Rosicler, Antofagasta.

BRANIFF, Thomas.

No. 2266—Chalcopyrite and Chalcocite. Depth 80 metres. "Constitucion" mine, Salado, Chañaral, Atacama.

No. 2267—Crysocolla, malachite and pyrite. Depth 40 metres. "Constitucion" mine, Salado, Chañaral, Atacama.

THE ARICA COPPER SYNDICATE. Tacna.

No. 2268—Chalcopyrite (23 per cent. copper). "Yuta" mine, Arica.

SOCIETÉ COMMERCIELLE FRANCAISE. Valparaiso.

No. 2269—Copper ore (22 per cent. copper, containing also gold and silver). Depth 69 metres. "Patrona" mine, Desierto, Copiapó.

No. 2270—Malachite (25 per cent. copper, with gold and silver). Depth 18 metres. "Justicia" mine, Desierto, Copiapó.

CORONA, O. Copiapó.

No. 2271—Malachite and copper oxide. "Tigre" mine, Azufre, Copiapó.

ZAVALA, T. Copiapó.

No. 2272—Copper ores. "Millonaria" mine, Patacones, Copiapó.

GUERRA, E. Anjel. Copiapó.

No. 2273—Carbonate and silicate of copper (20 per cent. copper). Depth 80 metres. "Purificación" mine, Morado, Copiapó.

THE COPAQUIRE COPPER SULPHATE CO., LTD. (Capital £300,000). Iquique.

No. 2274—Natural copper sulphate. Taracapá, near the Andes range.

CRUZ, Gregorio. Chañaral.

No. 2275—Copper pyrites (25 per cent. copper). Depth 50 metres. "Estaca" mine, Salado.

No. 2276—Malachite, copper carbonate (20 per cent. copper). Depth 20 metres. "Estaca" mine, Salado.

ZELADA, N. Copiapó.

No. 2277—Copper pyrites (20 per cent. copper). Ladrillos, Copiapó.

CLASS 208—Metallurgy of Antimony and other Metals not Specifically Classified—Methods and Appliances.

SOCIEDAD INDUSTRIAL DE ATACAMA. Copiapó. This company, whose copper mines and smelting plant have been spoken of in another part of this catalogue, possesses also some gold mines. The samples exhibited show ores from a very important mining district called "Cachiyuyo de oro," Copiapó, Atacama. The veins which are three in number and frequently jointed form bodies of ores of more than four metres in thickness. The greatest depth of the mines being 200 metres and have not yet reached the levels where pyrites are found.

No. 2278—Gold quartz (30 grams of gold per ton). "Diana" mine, Cachiyuyo de oro, Copiapó.

No. 2279—Gold quartz (30 grams of gold per ton). Depth 200 metres. "Andacollo" mine, Cachiyuyo de oro, Copiapó.

No. 2280—Gold quartz (20 grams of gold per ton). Depth 120 metres. "Descubridora" mine, Cachiyuyo de oro, Copiapó.

No. 2281—Tailings of the ores as shown by preceding samples (average 10 grams per ton, more or less).

HERNANDEZ & CO., Luis. Coquimbo.

No. 2282—Gold and silver ore (200 grams of gold and 1,800 ounces silver per ton). Depth 105 metres. "Sal" mine, Condoriaco, Coquimbo.

No. 2283—Gold and silver ore (150 grams of gold and 640 ounces silver per ton). "Sal" mine, Condoriaco, Coquimbo.

No. 2284—Gold and silver ore (300 grams of gold and 1,800 ounces silver per ton). Depth, 125 metres. "San José" mine, Condoriaco, Coquimbo.

No. 2285—Argentite (silver sulphide). (250 grams of gold and 13,600 ounces silver per ton.) "San José" mine, Condoriaco, Coquimbo.

No. 2286—Gold and silver ore. Depth 125 metres. "San José" mine, Condoriaco, Coquimbo.

No. 2287—Silver and copper ore (50 per cent. copper and 192 ounces silver per ton). "Marqueza" mine, Terno, Coquimbo.

No. 2288—Silver and copper ore (28 per cent. copper and 92 ounces silver per ton). "Marqueza" mine, Torno, Coquimbo.

No. 2289—Silver and copper ore (40–50 per cent. copper and 190–220 ounces silver per ton).

No. 2290—Gold and silver ore (500 grams gold and 5 per cent. silver). Depth 120 metres. "San José" mine, Condoriaco, Coquimbo.

MADARIAGA, Rudecindo. Coquimbo.

No. 2291—Gold ores (7 grams gold per ton). "San José" mine, Potrerillo Alto, Coquimbo.

COMPAÑIA MINERA TODOS SANTOS. Coquimbo.

No. 2292—Silver and gold ore (20 grams gold and 120 ounces silver per ton). Depth, 12 metres. "Vetarrón" mine, Quitana, Coquimbo.

No. 2293—Silver ore (384 ounces silver per ton). "Vetarrón" mine, Quitana, Coquimbo.

No. 2294—Silver ore (128 ounces silver per ton). Depth 115 metres. "Vetarrón" mine, Quitana, Coquimbo.

PRIETO, R. Copiapó.

No. 2295—Gold ore. "Sapos" mine. Nuestra Señora de Andacollo, Copiapó.

SUCESION MATTA. Copiapó.

No. 2296—Silver ore (1,500 grams silver per ton). Depth 25 metres. "Buena Esperanza" mine, Chimbero, Copiapó.

PANDO, Gabriel. Talca. The samples exhibited are from the new workings opened at the famous and important mineral district called "El Chivato" near Talca.

This mineral is formed by several veins, some of them reaching a width of 14 metres, thus the amount of ore is very large. Old workings having reached a depth of 200 metres are drowned at present, but the dumps of the different mines, whose ores average from 9 to 15 grams gold per ton, prove that the veins are very rich. The nature of the ore is iron pyrite and quartz, free amalgamation yielding, more or less, 60 per cent. of the gold assayed.

At present there is a small mill being operated with economical success, capable of grinding from 20 to 25 tons of ore per day.

With sufficient capital and scientific methods and treatment of the ores this mineral can become one of the most productive in the country.

No. 2297—Gold-bearing pyrites (25 grams gold per ton). "Chuchunco" mine, Chivato, Talca.

No. 2298—Gold-bearing pyrites, showing the dumps of the mine (9 to 15 grams gold per ton). "Chuchunco" mine, Chivato, Talca.

SUCESION CERVERÓ. Cabildo.

No. 2299—Gold-bearing pyrites. 18 metres in depth. "Serena" mine, Petorca, Aconcagua.

No. 2300—Gold-bearing pyrite. Depth 20 metres. "Maria" mine, Maria, Petorca, Aconcagua.

COMMISSION OF CHILE. Santiago.

No. 2301—Gold quartz. Inca, Copiapó, Atacama.
No. 2302—Gold ore. "Reina" mine, Mocha, Tarapacá.
No. 2303—Gold pyrites (2 metres thick). "Espino" mine, Bronce, Petorca, Aconcagua.
No. 2304—Gold-bearing pyrites. "Chepon" mine, Petorca, Aconcagua.
No. 2305—Gold-bearing pyrites. "Bronce" mine, Bronce, Petorca, Aconcagua.
No. 2306—Gold-bearing pyrites. "Rosario" mine, Bronce, Petorca, Aconcagua. Depth, 200 metres.
No. 2307—Gold in quartz and barites. Guanaco, Taltal. This mineral district, which is one of the richest in the world as well as in Chile, has yielded great quantities of gold in this same kind of ore towards the upper levels, while in the lower levels it has changed to rich copper ore with a fine amount of gold. The production of copper ore was very important in this district last year and the mines are being worked at present in the lower levels in order to increase the production on a much larger scale.
No. 2308—Argentite (silver sulphide) on limestone. "Resurrección" mine, Caracoles, Antofagasta.
No. 2309—Cerussite on galena. "San José" mine, Elqui, Coquimbo.
No. 2310—Silver and lead ore. "Elena" mine, Las Condes, Santiago.
No. 2311—Cinnabar, ajurit and quartz. "Azogue" mine, Punitaqui, Coquimbo.
No. 2312—Silver and lead ore. "Elena" mine, Las Condes, Santiago.
No. 2313—Lead and silver ore. "Elena" mine, Las Condes, Santiago.
No. 2314—Gold quartz and hematite. Cachiyuyo, Atacama.
No. 2315—Gold quartz and hematite. Cachiyuyo, Atacama.
No. 2316—Gold quartz. Huanaco, Taltal, Antofagasta.
No. 2317—Argentite (silver sulphide) and barite. Las Condes, Santiago.
No. 2318—Native silver and argentite. "Buena Esperanza" mine, Cimbero, Atacama.
No. 2319—Gold and copper ores. "Carmen" mine, Petorca, Aconcagua.
No. 2320—Gold, silver and copper ore. "Mercedes" mine, Condoriaco, Coquimbo.
No. 2321—Native silver. "Puebla" mine, Caracoles, Antofagasta.
No. 2322—Gold quartz and barite. Huanaco, Taltal, Antofagasta.
No. 2323—Lead and silver ores. "Elena" mine, Las Condes, Santaigo.
No. 2324—Gold quartz. "Diana" mine, Cachiyuyo, Copiapó, Atacama.
No. 2325—Gold quartz and hematite. "Descubridora" mine, Cachiyuyo, Atacama.
No. 2326—Gold-bearing barite and iron oxide. "San Lorenzo" mine, Guanaco, Taltal, Antofagasta.
No. 2327—Lead and silver ore. "Covadonga" mine, Juncal, Atacama.
No. 2328—Argentite. "Arturo Prat" mine, Taltal, Antofagasta.
No. 2329—Gold quartz. "Piques" mine, Las Cardas, Coquimbo.
No. 2330—Gold quartz and barite. "San Lorenzo" mine, Guanaco, Taltal.
No. 2331—Cinnabar, quartz and hematite. "Azogue" mine, Punitaqui, Coquimbo.
No. 2332—Cassiterite (tin oxide). Sierra Soncor, Puna de Atacama.
No. 2333—Argentite in barite. "San Lorenzo" mine, Las Condes, Santiago.
No. 2334—Silver-bearing galena and chalcopyrite. "Purísima" mine, Las Condes, Santiago.
No. 2335—Galena and cerussite. "Fortuna del Sur" mine, Morado, Copiapó.

No. 2336—Silver ore. "Santo Domingo" mine. Caracoles, Antofagasta.
No. 2337—Silver ore. "Santa Rosa" mine, Tarapacá.
No. 2338—Gold and copper ore. "Rosario" mine, Luca, Copiapó, Atacama, E.B.
No. 2339—Galena, rich in silver. "Japonesa" mine, Copiapó, Atacama.
No. 2340—Silver ore. At the foot of the mountains in Taltal, Antofagasta.
No. 2341—Gold-bearing pyrites. Petorca, Aconcagua.
No. 2342—Gold-bearing pyrites. Depth 28 metres. "Chepon Nuevo" mine, Cantarito, Petorca, Aconcagua.
No. 2343—Cinnabar (mercuric sulphide). "Pintados" mine, Tarapacá.
No. 2344—Silver, lead and copper ore. "Armonia" mine, Vicuña, at 60 miles from Antofagasta and 14 miles from the coast. Depth from 50 to 75 metres. From 640 to 900 ounces silver per ton.
No. 2345—Argentite and silver chloride in limestone and barite. "Casilda" mine, Caracoles, Antofagasta.
No. 2346—Tailings of the amalgamation of silver ores. Copiapó.

SOCIEDAD MINERA ARTURO PRAT. Valparaiso. This company possesses various mines in the mineral district of Cachinal, Taltal, Antofagasta, that have been worked on a productive scale for more than 20 years. The ores are reduced in a plant owned by the same company in the harbor of Taltal, doing the amalgamation by the Kröncke process. The veins have yielded more than 300,000 kilograms of silver. The average content in silver has been from 64 to 80 ounces per ton.

No. 2347—Silver ore (224 ounces silver per ton). "San Victor" mine, Cachinal, Taltal, Antofagasta.
No. 2348—Silver ore. Depth 200 metres; 160 ounces silver per ton.
No. 2349—Silver ore. Depth 210 metres; 320 ounces silver per ton.
No. 2350—Silver ore. Depth 250 metres; 400 ounces silver per ton.
No. 2351—Silver ore. Depth 120 metres; 400 ounces silver per ton.
No. 2352—Silver ore. Depth 120 metres; 150 ounces silver per ton.
No. 2353—Silver ore. Depth 270 metres; 192 ounces silver per ton.

RODRIGUEZ, José Manuel. Los Andes.

No. 2354—Mispickel and antimony ore. "Chile" mine, Los Andes, Aconcagua.

SOCIEDAD MINERA DE CHALLACOLLO. Iquique. This company possesses very abundant silver and lead ores which are reduced by the Russell process of lexiviation with hyposulphide of soda. The only plant in the country that employs this process for the recovering of silver. Dissolved silver is precipitated by sodium sulphide, and the resulting sulphide of silver, containing from 25 to 30 per cent. silver, and from 2 to 7 per cent. gold, is shipped to Europe.

The quantity of silver produced is 5,000 kilograms per year, the average grade of the ore being from 1 to 12 per cent. of silver.

The works on the mine and the recovering plant are very well conducted, and the future of this company appears to be a splendid one. The ore yields by this process from 85 to 90 per cent. of the silver contained.

No. 2355—Silver and lead ore. "Buena Esperanza" mine, Challacollo, Iquique.
No. 2356—Silver iodide and galena. "Buena Esperanza" mine, Challacollo, Iquique.

No. 2357—Samples of silver ore showing the different kinds of ores found in the "Buena Esperanza" mine, Challacollo, Iquique.

No. 2358—Silver sulphide obtained by precipitation from solutions in the Russell process (60 per cent. silver). This product is shipped to Europe. Annual production 5,000 kilograms of fine silver.

ESCOBAR & BROWN. Copiapó.

No. 2359—Silver ore (16 ounces per ton). Depth 40 metres. "Al fin hallada" mine, Tres Puntas, Copiapó.

No. 2360—Limestone of the Jurassic formation in which the veins are found.

SUCESION MATTA. Copiapó.

No. 2361—Silver ore (12 ounces per ton). Depth 35 metres. "Buena Esperanza" mine, Chimbero, Copiapó, Atacama.

TORO, Santiago and Alberto. Copiapó. This mine is one of the few that yields a fair amount of silver in this mineral district of Punta Brava, a district which is worth the investment of capital to work and develop the old closed down mines from which very rich ores were extracted without providing the mines with the necessary supplies for keeping the workings going.

No. 2362—Silver ore. "Pepa" mine, Punta Brava, Copiapó.

DEVESCOVI, J. & CO.

No. 2363—Silver-bearing galena. "San Felix" mine, Yabricoya, Tarapacá.

No. 2364—Silver-bearing galena and cerussite. "Jauja" mine, Yabricoya, Tarapacá.

SOCIEDAD MINERA DE BORDOS. Although this mine was discovered in 1857, only some secondary veins were worked in a primitive manner. These veins yielded a large amount of natural amalgam.

In 1880, Señores Garcia and Echeverría Blanco began developing the mine by working the big vein which forms the contact between the country rock (porphyry) and a large layer called the "Manto Cantera."

They developed the mine to a very fine state and later introduced hoisting engines, air compressors, steam engines and a long inclined double gauge plan for the transportation of ores from the mine to the ground. With all these improvements this mine must be considered as one of the best worked in our country, and reflects credit on their owners.

Ores that are found in bodies of more than 2 metres wide, and recognized throughout a horizontal extension of 800 metres, are principally formed by clay in the shape of small layers, between which the chlorobromide of silver is the most frequent mineralogical specimen that appears in the mine. Often in the joints of the layers native silver in the form of thin sheets, silver sulphide and silver iodide is found.

The depth of the mine, measured by the inclination of the principal pit, is 650 metres.

The average grade of the ore is from 18 to 20 ounces silver per ton. The production has been as follows:

Years.	Tons of Ore.	Silver Contained.	Profit.
1880–1888	53,007	66,197	$846,700
1889–1893	30,130	35,875	686,709
1884–1900	70,352	81,114	506,253
1880–1900	153,489	183,187	$2,039,943

The total production having a value of $5,762,380, and the profit as stated in the above figures.

The following samples represent the different kinds of rocks found in the mine, and the different kinds of ores, according to the vertical section of the plan of the mine exhibited.

No. 2365—Thirty-three samples of all kinds of rocks near the vein, as well as of country rock. Details can be found written on each sample, indicating the spot in the plan where the samples come from.

No. 2366—Six samples of different kinds of ores. Details can be found on the labels showing also the part of the vein marked in the plan from where the samples come.

No. 2367—Tailings obtained in the milling of the ores above mentioned.

COMPANIA DE LEXIVIACION DE MINERALES DE PLATA. Iquique.

No. 2368—Silver sulphide (25 per cent. silver). Obtained by precipitation.

GROUP 60—NON-METALLIC MINERAL PRODUCTS.

CLASS 209—Abrasive, Grinding and Polishing Materials.

JERIA, Arnaldo. Santiago.

No. 2369—Substitute of garnet, etc., for polishing purposes.

PUELMA TUPPER, Francisco. Santiago.

No. 2370—Diatomite. "Kieselguhr," Negrete, Mulchen.

CLASS 210—Limestone, Cement and Artificial Stone—Methods and Processes.

COMMISSION OF CHILE. Santiago.

No. 2371—Limestone. Very abundant deposits near Pueblo Hundido, Chañaral, Atacama.

VILLARROEL, Arturo. Santiago.

No. 2372—Limestone. Tiltil. Very abundant deposits of this calcite. Used as flux in the smelting plant.

HAEBIG, Otto. Santiago.

No. 2373—Roof tiles made of cement.

ROCA I CRUZ. Santiago.

No. 2374—Artificial stone used for floors.

MORANDÉ, Salvador. Santiago.

No. 2375—Artificial stone used for floors.

MAURER Y GEIGER. Calera.

No. 2376—Portland cement.

COUSIÑO, Carlos. Santiago.

No. 2377—Portland cement. Calera.

CLASS 211—Graphite and its Products.

COMMISSION OF CHILE. Santiago.

No. 2378—Graphite. Chehueque. Near Vallenar, Atacama.

CLASS 212—Clays and other Fictile Materials and their Direct Products.

RAMIREZ, Ramon, & OYARZO, Camilo. Iquique.

No. 2379—Kaoline sample. Near Iquique.
No. 2380—Fine kaoline sample. Near Iquique.
No. 2381—Sapolio, manufactured with the koaline mentioned above.

VILLARROEL, Arturo. Santiago.

No. 2382—Common kaoline. Tiltil, Santiago.
No. 2383—Selected kaoline. Tiltil, Santiago.
No. 2384—First-class selected kaoline. Tiltil, Santiago.

COMPAÑIA EXPLOTADORA DE LOTA Y CORONEL. Valparaiso. This company owns two plants near the coal mine for the manufacture of bricks, pipes, flower-pots, statues, etc., made of ordinary clay and fire-clay extracted from the coal mines together with the coal. More than 150 workmen are occupied in these two plants.

No. 2385—Fire-clay from a layer near the coal seams. Used for fire-bricks, sewer pipes, flower-pots, etc. Annual production, 4,520 tons.
No. 2386—Fire-clay worked and prepared for manufacture.
No. 2387—Quartz used for the manufacture of fire-bricks.
No. 2388—Mixture of fire-clay and quartz showing the composition of fire-bricks.
No. 2389—Fire-bricks made with the mixture shown above.
No. 2390—Fire-bricks for furnace bottoms.
No. 2391—Flower jar with pedestal.
No. 2392—Flower jars with pedestals, Nos. 4, 5, 9, 10, 11, 12, 17.
No. 2393—Large flower-pot in the shape of a tree-trunk and branches.
No. 2394—Two pedestals for statues or jars.
No. 2395—Fourteen different sizes sewer pipes, from 8 to 40 metres diameter.
No. 2396—Overflow pipe, 10 metres diameter.
No. 3397—Joint of 15 metres diameter.
No. 2398—Small statue holding light.
No. 2399—Fire-bricks, six different shapes and sizes.
No. 2400—Different kinds of bricks.
No. 2401—Bricks for flooring.
No. 2402—Pedestal for small statue.

CLASS 213—Salts, Sulphur, Pigments and Miscellaneous Useful Minerals and Products.

COMMISSION OF CHILE. Santiago.

No. 2403—Natural sulphur. Taltal, Antofagasta.
No. 2404—Natural sulphur. Taltal, Antofagasta.
No. 2405—Natural sulphur. Choquenanta, Tarapacá. Worked and used without refining for the manufacture of gunpowder in the nitrate of soda works.
No. 2406—Natural sulphur (92 per cent. sulphur). Ollagüe Vulcan, Antofagasta. Abundant deposits worked by natives.
No. 2407—Natural sulphur. Maricunga, Copiapó, Atacama.
No. 2408—Gypsum. Vetana, Coquimbo.
No. 2409—Gypsum. "Matilde" mine, Elqui, Coquimbo.
No. 2410—Quartz crystals. Tilama, Petorca, Aconcagua.
No. 2411—Quartz. Very abundant deposits near Coquimbo.
No. 2412—Quartz. Chañaral, Atacama.
No. 2413—Colemanite (borate of lime). Pocopoconi, Tarapacá.
No. 2414—Colemanite (borate of lime). Dioloque, Tarapacá.
No. 2415—Colemanite (borate of lime, 26 per cent. boric acid). Dioloque, Puna de Atacama, Antofagasta.
No. 2416—Colemanite (borate of lime). Surire, Tarapacá.
No. 2417—Ulexite (borate of soda and lime). Ascotan, Tarapacá. 34 per cent. boric acid.
No. 2418—Calcinated ulexite (42 per cent. boric acid). Ascotan, Antofagasta. This is the most productive and worked borax deposit in the country.
No. 2419—Crystallized boric acid (83 per cent. boric acid). Puchulteca geysers, Tarapacá.
No. 2420—Pickeringite (magnesia alum). Pintados, Iquique, Tarapacá.
No. 2421—Tamaruguite (soda alum). Pintados, Tarapacá.
No. 2422—Mirabilite (Glauber salt). Sulphate of sodium. Pampa, Cumillalla, Tarapacá.
No. 2423—Pickeringite (magnesia alum). Tarapacá.
No. 2424—Blödite (sulphate of magnesia and soda). Pintados, Tarapacá.
No. 2425—Potassium chloride (16 per cent. chloride). Bellavista, Iquique, Tarapacá.
No. 2426—Pickeringite (magnesia alum). Pintados, Tarapacá.
No. 2427—Tamaruguite (soda alum). Pintado, Tarapacá.
No. 2428—Soda and iron oxide cromate. Pintados, Tarapacá.
No. 2429—Common salt. Pueblo Hundido, Chañaral, Atacama.
No. 2430—Common salt. Maricunga, Copiapó, Atacama.

DEVOSCOVI, QUIROGA & CO. Iquique.

No. 2431—Natural sulphur. Sillajualla, Tarapacá. Very abundant deposits that are being worked at present to supply the greater part of the local demand. The sample averages 99.54 per cent. sulphur, such pure sulphur being very abundant in these deposits.

LAS TERMAS DE CHILLAN. The Thermal Baths of Chillan.

No. 2432—Natural sulphur. Near the Chillan baths. Abundant deposits near the Volcan.
No. 2433—Magnesia salt. Chillan baths.

GODOY, Samuel. Vallenar.

No. 2434—Natural gypsum. "Despreciada" and "Vallenar" mines, Vallenar, Atacama.

No. 2435—Gypsum, raw and ground, used as fertilizers. "Despreciada" and "Vallenar" mines, Vallenar, Atacama.

No. 2436—Gypsum, calcinated and ground. Same locality.

VILLARROEL, Arturo. Santiago.

No. 2437—Quartz. Abundant deposits near Tiltil, Santiago.

SOCIEDAD BORATERA "LA ESPERANZA." Pisagua.

No. 2438—Natural borax. Sururi, Pisagua, Tarapacá.

GOICOVICH, Jesus M. Antofagasta.

No. 2439—Colemanite (borate of lime). Puna de Atacama, Antofagasta. Extension of the claim 750 hectares.

WALKER, Norman. Antofagasta.

No. 2440—Ulexite (borate of lime and soda). "Rio Grande" mine, Puna de Atacama, Antofagasta.

ESCUDERO, Ramón. Iquique.

No. 2441—Potassium carbonate, manufactured product. Iquique.

No. 2442—Sodium carbonate, manufactured product. Iquique.

No. 2443—Nitrate of potassium, manufactured product. Iquique.

BLUMITT, Emilio. Iquique.

No. 2444—Common salt (99 per cent. sodium chloride). Iquique, Tarapacá.

HERRERA DEL RIO & CO. Iquique.

No. 2445—Rock salt (99.5 per cent.). Punta de Lobos. Inexhaustible deposits of salt that can supply the entire country's demand when worked on a large scale.

No. 2446—Common salt (99.4 per cent.). Punta de Lobos.

No. 2447—Extra fine salt (99.6 per cent.). Punta de Lobos.

No. 2448—Common salt (99.6 per cent.). Punta de Lobos.

BAÑOS DEL TORO. Coquimbo.

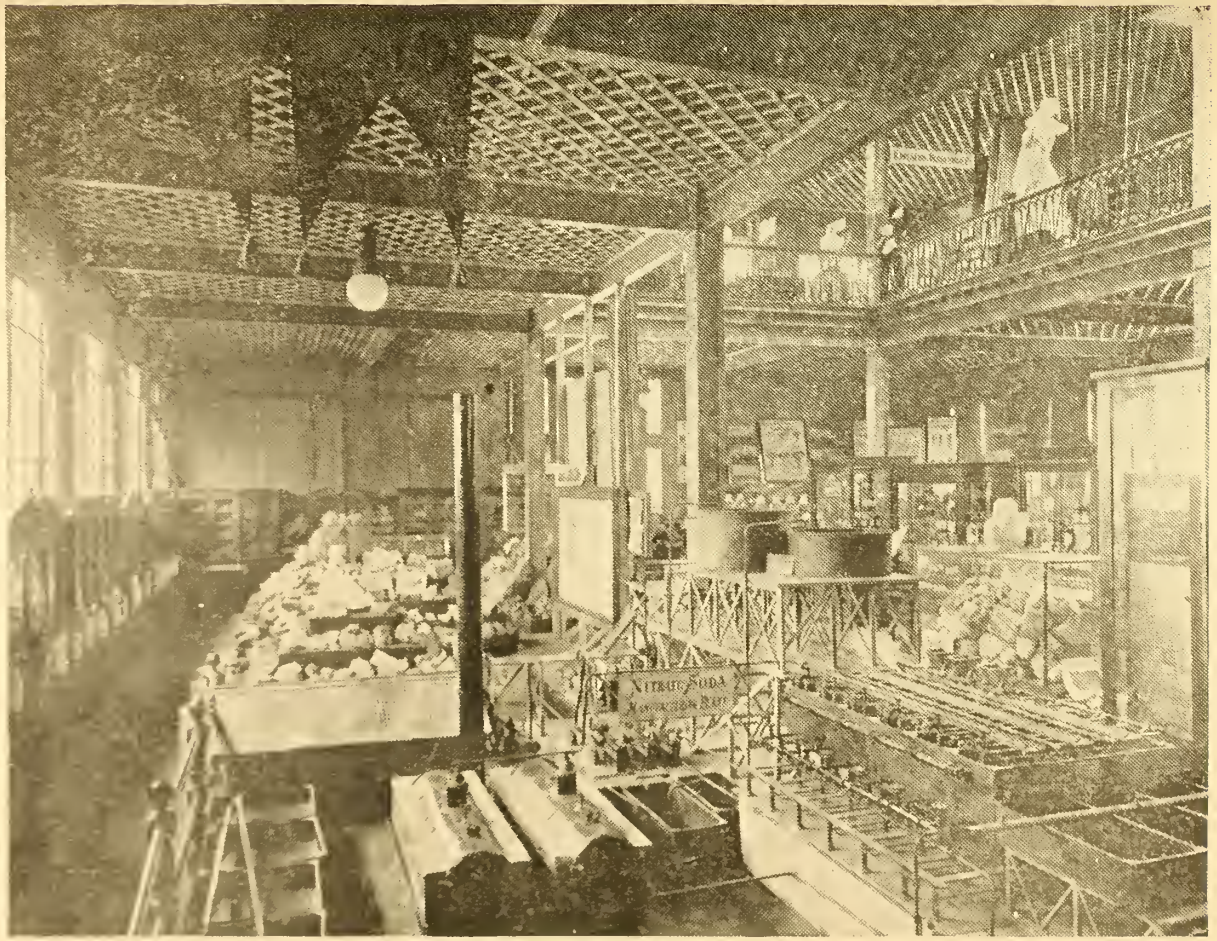
No. 2449—Natural sulphur. Near the baths in the Andes range.

No. 2450—Magnesia sulphate. From the baths.

DELEGACION FISCAL DE SALITRERAS Y ASOCIACION DE PROPAGANDA DEL SALITRE. Iquique. In order to show in the best possible manner the details concerning the manufacture of nitrate of soda, which is the principal mineral product of Chile, a model of a manufacturing plant is placed on exhibition. The different operations in the manufacture can be followed in the most visible manner on seeing this model, which gives an accurate idea of the process. Raw materials of different kinds and nitrate of soda, iodine and potassium perchlorate are also to be seen. A large number of photographs and pictures show the workings of the nitrate fields, the manufacture, shipping and loading of the nitrate of soda, and the results obtained therefrom when used as a fertilizer.

Annual production of nitrate of soda, 1,507,000 metric tons.

Annual production of iodine, 318 metric tons.



MINING EXHIBIT.

Potassium perchlorate was produced on a large scale within the last two years, the production not having increased owing to the small commercial demand for this product.

No. 2451—Section of the nitrate of soda fields made with material in half natural size showing the different layers of the formation.

No. 2452—Different kinds of raw nitrate of soda as it is taken out of the ground.

No. 2453—Raw soda nitrate. "San Antonio," Tarapacá.

Analysis: Nitrate of soda.....19.50 per cent.
Salt.....67.10 per cent.
Iodine.....0.006 per cent.

No. 2454—Raw soda nitrate. "Abra de Quiroga," Tarapacá.

No. 2455—Raw soda nitrate. "San Antonio," Tarapacá.

No. 2456—Raw soda nitrate. "San Antonio Viejo," Tarapacá.

Analysis: Nitrate of soda.....34.00 per cent.
Salt.....22.3 per cent.
Iodine.....0.378 per cent.

No. 2457—Raw soda nitrate, different kinds. "Ramón Benavides" and "San Ramón."

No. 2758—Raw soda nitrate (called "terroso" or earthy). "Josefina," Tarapacá.

Analysis: Nitrate of soda.....35.00 per cent.
Salt.....6.0 per cent.
Iodine.....0.028 per cent.

No. 2759—Raw soda nitrate, yellow, white and violet, from different places. Tarapacá.

No. 2760—Raw soda nitrate. "Paposo," Tarapacá.

Analysis: Nitrate of soda.....45.5 per cent.
Salt.....21.1 per cent.
Iodine.....0.111 per cent.

No. 2761—Raw soda nitrate, white color. "Democracia" mine, Tarapacá.

No. 2762—Raw soda nitrate. "Carmen Bajo," Tarapacá.

No. 2763—Raw soda nitrate. "San Antonio," Tarapacá.

Analysis: Nitrate of soda.....65.00 per cent.
Salt.....28.00 per cent.
Iodine.....0.190 per cent.

No. 2764—Raw soda nitrate. "San Antonio," Tarapacá.

Analysis: Nitrate of soda.....42.00 per cent.
Salt.....48.00 per cent.
Iodine.....0.02 per cent.

No. 2465—Raw soda nitrate, containing nitrate of lime. "Josefina," Tarapacá.

No. 2466—Raw soda nitrate, containing nitrate of lime. "Amelia," Tarapacá.

No. 2467—Raw soda nitrate. "Carmen Bajo," Tarapacá.

Analysis: Nitrate of soda.....54.5 per cent.
Salt.....25.7 per cent.
Iodine.....0.048 per cent.

No. 2468—Big lump taken from the layer that covers the nitrate of soda layers. The thickness of this layer is 5 to 15 feet, the composition being a mixture of stone, pebbles, clay, common salt, gypsum and other salts in small quantity.

No. 2469—Iodine. As obtained by precipitation, filtration.

No. 2470—Iodine. Sublimated.

No. 2471—Potassium perchlorate (99.2 per cent. potassium perchlorate). "Santa Isabel," Tocopilla, Antofagasta.

No. 2472—Potassium perchlorate (97 per cent. potassium perchlorate). "Santa Fé del Toco."

No. 2473—Model of a nitrate of soda manufacturing plant. Iquique.

GROUP 61—MINERAL COMBUSTIBLES.

CLASS 214—Coal and Coke.

In the southern part of the country and surrounding the Arauco Bay are located the most important deposits of coal in actual working.

Coal seams appear in the superior tertiary formation, its geological character being close to the lignite. Notwithstanding, the analysis, as given below, averages a composition that would locate this coal higher than ordinary lignite, nearer real bituminous coal. Many seams appear in the carboniferous formations, but only three of them are worthy of working; the average width of three seams is 1.36 metres and 176 metres.

Some outcrops of coal layers are also found in other parts of the country, as in San Fernando, at the foot of the Andes range, where new prospecting is now being made with great encouragement to the owners. A thin seam of anthracite that has been worked without economical success is known to exist in Copiapó, near La Ternera; also near Temuco, Traigen, Carahue and Valdivia, where recent new discoveries have demonstrated the existence of good coal. A new plant for working and developing the coal mines has been constructed in the south near Punta Arenas, encouraged by the quantity and quality of the coal which is considered superior to that of Lota and Coronel.

The total country's production of coal amounts to 893,000 tons. Much of this coal is consumed by the steamers that run from Europe to Chile.

COMPAÑIA EXPLOTADORA DE LOTA Y CORONEL. Valparaiso. This company produces most of the coal in the country. At present it is conducting the works in three different pits, which are maintained as separate mines, owing to the fact that the working is done below the sea, thus to prevent the flooding of the entire mine should the sea break in. The annual output by this company is 373,000 metric tons. From 2,000 to 2,500 workmen are employed in these mines. The total amount of water drained from the coal mines is only 25 litres per second.

The company owns a very extensive coal field; the part now being developed measures 5,000 metres from north to south and 1,000 metres from east to west.

A section of these mines, as well as photographs of the works, can be seen near the coal exhibit made by this company.

No. 2474—Coal sample. "Carlos" Pit, Lota.

Analysis:

Fixed carbon	51.30 per cent.
Volatile matter	41.80 per cent.
Water	3.80 per cent.
Ash	3.10 per cent.

ARAUCO COMPANY, LIMITED. Coronel. This company is working well developed coal mines and owns the railroad that runs from Concepción to Curanilahue, passing through Coronel and Lota.

Their annual output of coal amounts to 150,000 metric tons.

Coal dust and small pieces of coal are compressed into bricks, as shown by the sample.

No. 2475—Coal samples from Colico, Arauco.

An analysis has given the following composition:

Fixed carbon	51.05 per cent.
Volatile matter	41.85 per cent.
Water	3.70 per cent.
Ash	3.40 per cent.

No. 2476—Coal briquets. Arauco.

VERGARA, Luis A. Santiago.

No. 2477—Coal sample from new prospecting at the foot of the Andes range, near San Fernando. Width of vein 1.20 metres. Distance to San Fernando, 15 miles. 5,000 feet above sea level.

COMMISSION OF CHILE. Santiago.

No. 2478—Coal sample. Penco, Concepción. Annual production, 20,000 metric tons.

Analysis:

Fixed carbon	42.80 per cent.
Volatile matter	41.30 per cent.
Water	12.88 per cent.
Ash	3.00 per cent.

No. 2479—Coal sample (anthracite). Quilacoya, Concepción. Not being worked.

Analysis:

Fixed carbon	84.90 per cent.
Volatile matter	6.20 per cent.
Water	3.50 per cent.
Ash	5.40 per cent.

No. 2480—Coal sample. Talcahuano, Concepción.

Analysis:

Fixed carbon	44.50 per cent.
Volatile matter	37.44 per cent.
Water	14.00 per cent.
Ash	4.00 per cent.

No. 2481—Coal sample. Colico, Arauco.

Analysis:

Fixed carbon	49.00 per cent.
Volatile matter	43.00 per cent.
Water	4.00 per cent.
Ash	4.00 per cent.

No. 2482—Coal sample. Lebu mines, Arauco. Annual production, 100,000 tons.

Analysis:

Fixed carbon	44.60 per cent.
Volatile matter	45.60 per cent.
Water	4.20 per cent.
Ash	5.60 per cent.

GROUP 62—QUARRY PRODUCTS.

CLASS 218—Marbles.

URRUTIA Y ODE é HIJOS. Santiago. Owners of the only plant for cutting and polishing marbles in the country. For some months this company has been working with the most encouraging results, but, unfortunately, the works have been suspended recently on account of some difficulties among its members. In this plant the marbles of various deposits are worked, principally those from Vallenar, Atacama, which are very abundant and of a good quality.

No. 2483—Five samples of marble plates. Vallenar, Atacama.

VALLEJO, Joaquín.

No. 2484—Mexican onyx (Alabaster). Punta del Diablo, Copiapó, Atacama.

COMMISSION OF CHILE. Santiago.

No. 2485—Seventeen samples of marbles, showing different colors, from Vallenar, Atacama. The outcrops of these layers are recognized in a length of 3 miles and, in some parts, the thickness of the deposits is more than 250 feet.

No. 2486—Alabaster. Taltal, Antofagasta.

No. 2487—Block of marble. Vallenar, Atacama.

CLASS 219—Ornamental Stones.

MERY, Santiago, Coquimbo. He owns the most important deposits of lapiz-lazuli in the country and perhaps in the world. Although these deposits were worked on a very large scale some years ago, at present they are closed down waiting for a better demand for this article. These deposits are located in the Andes Mountains, and the road leading to it is in bad state.

No. 2488—Lapiz-lazuli. Ovalle, Coquimbo.

CLASS 220—Building Stones.

CUNNINGHAM, Tomas. Coquimbo.

No. 2489—Three different kinds of building stones. "Santa Rita" quarry.

COMMISSION OF CHILE. Santiago.

No. 2490—"Caucagua" stone. Very soft after being taken from the ground and hardens in the air and is used for all building purposes in Chiloé.

No. 2491—Three stones for base of column, from Chillan.

No. 2492—Two stones for pavements.

GROUP 63—LITERATURE AND STATISTICS.

CLASS 221—Literature, History and Statistics on Mining and Metallurgy—Maps, Models and Pictures Illustrating the Geology and Distribution of Minerals and Mines and the Methods of Working Same—Charts, Diagrams and Tabular Representations—Mine Engineering—Statistics on Mining and Metallurgy.

DEVESCOVI, José. Iquique.

No. 2493—Three plans of the "Jauja" mine, Jabricoya, Iquique.
No. 2494—Plan and vertical section of the "San Félix" mine. Jabricoya, Iquique.
No. 2495—Topographical plan of the "Jabricoya" mineral district.

DELEGACION FISCAL DE SALITRERAS.

No. 2496—Vertical section of the nitrate of soda layers.
No. 2497—Maps of the nitrate of soda fields from Arica to Tocopilla.
No. 2498—Plan of the "Toco" nitrate of soda fields.
No. 2499—Plan of the "Aguas Blancas" nitrate of soda fields.
No. 2500—Plan of the "Taltal" nitrate of soda fields.
No. 2501—Map of the interior part of Pisagua.
No. 2502—"Geografía de Tarapacá," by G. Billinghurst.
No. 2503—Album containing 24 plans of nitrate of soda fields.

BRUNO GONZALEZ, José. Santiago.

No. 2504—Map of the mineral district of "Cajon de Maipo." Santiago.

BALFOUR, LYON & CO. Valparaiso.

No. 2505—Plan of a modified copper smelting furnace.

HARDIE & CO. Valparaiso.

No. 2506—Plan of a blast furnace.

SOCIEDAD MINERA DE BORDOS. Copiapó.

No. 2507—Vertical section of the "Bordos" mine.

SOCIEDAD INDUSTRIAL DE ATACAMA. Copiapó.

No. 2508—Photographs showing smelting plant and different mines.

THE COPIAPO MINING COMPANY. Copiapó.

No. 2509—Photographs of different mines and plans of the mines.

URRUTIA, ODE é Hijo. Santiago.

No. 2510—Two photographs of the marble cutting and polishing plant.

COMPAÑIA DE HUANCHACA. Valparaiso.

No. 2511—Plans of the copper and silver recovering plant of "Playa Blanca," Antofagasta.

MUÑOZ, Santiago.

No. 2512—Map of the Department of Vallenar.

ASOCIACION SALITRERA DE PROPAGANDA. Iquique.

No. 2513—Collection of photographs, showing views of the works at the nitrate of soda fields and the manufacturing plant.

COMPAÑIA EXPLOTADORA DE LOTA Y CORONEL.

No. 2514—Geological section of the coal fields.

No. 2515—Section of the principal pit, showing the different strata of the carboniferous formation.

COMMISSION OF CHILE. Santiago.

No. 2516—Mineralogical map of Chile, showing location of all mineral districts in the country and demonstrating in tabular form the statistical figures of the mineral production of the country and many other data referring to mines and metallurgy.

No. 2517—Geological map of the North of Chile.

No. 2518—Photographs of plans of important mines in Caracoles, Antofagasta.

No. 2519—Photographs of plan of the "Desengaño" mine.

No. 2520—Photograph of plan of "Batuco" mineral district.

No. 2521—Plan and geological section of Chañarcillo, the richest silver mineral district of Chile.

No. 2522—Collection of photographs of Lota coal mines, showing electrical power transmission, mines and dependencies.

No. 2523—Collection of photographs of "Elisa de Bordos" mine.

No. 2524—Collection of photographs of the nitrate of soda works and manufacturing plant.

No. 2525—Collection of photographs of the principal mines of Coquimbo.

No. 2526—General view of Panulcillo.

No. 2527—General view of Tamaya.

No. 2528—"Mineralojía. Primera parte: Minerales metálicos" (Mineralogy. First part: Metallic minerals), by Ignacio Domeyko, 1897.

No. 2529—"Mineralojía. Segunda parte: Minerales no metálicos" (Mineralogy. Second part: Non-metallic minerals), by Ignacio Domeyko, 1897.

No. 2530—"Tratado de Ensayes" (Treatise on Assays), by Ignacio Domeyko, 1898.

No. 2531—"Apuntes sobre la Minería y Metalurjía en Chile" (Notes on Mining and Metallurgy in Chile), by Charles Vattier, 1901.

No. 2532—"L'Avenir de la Metallurgie du Fer au Chile." Paris, 1890. (The Future of Metallurgy of Iron in Chile). French edition.

No. 2533—"El porvenir de la Metalurjía del Fierro en Chile." Santiago, 1890. (The Future of Iron Metallurgy in Chile), by Charles Vattier. Spanish edition.

No. 2534—"Apuntes sobre las condiciones de Chile para la instalación de la Metalurjía del Hierro," Santiago, 1901, and "Conditions of Chile for the Installation of Iron Metallurgy," by Charles Vattier, Buffalo, N. Y., 1901. Spanish and English editions.

No. 2535—"Informe presentado al Real Tribunal de Minas por su Secretario don Juan Egaña en 1803" (Report presented to the Royal Tribunal on Mines by its Secretary Don Juan Egaña in the year 1803). 1894.

No. 2536—"El libro de la Plata" (The Book on Silver), by B. Vicuña Mackenna.

No. 2537—"El libro del Cobre y del carbón de piedra en Chile" (Book on Copper and Coal in Chile), by B. Vicuña Mackenna.

No. 2538—"Proyecto de Código de Minería para la República de Chile" (Proposed Mining Code for the Republic of Chile), by Rodolfo Pinochet Herreros, 1899.

No. 2539—"Apuntes sobre la Mineria y la Metalurjía de Chile," Santiago, 1901, and "Notes on the Mining and Metallurgy Industries in Chile," Buffalo, N. Y., 1901, by Charles Vattier.

SOCIEDAD NACIONAL DE MINERIA.

No. 2540—"Memoria del Directorio á la Junta General" (Report presented by the Board of Directors to the General Assembly of the National Mining Association). 1895.

No. 2541—"Colección del Boletín de la Sociedad hasta 1900 (Monthly Bulletin of the Association, to 1900).

No. 2542—"Reseña Industrial é Histórica de la Minería i Metalurjía en Chile" (Industrial and Historical Sketches on Mining and Metallurgy in Chile), by Francisco J. San Román, 1894.

No. 2543—"Padron General de Minas y Código de Minería de la República de Chile." Santiago, 1901. (General catalogue of the mines of Chile with information concerning same and mining code of the country).

No. 2544—"La Industria del oro en Chile" (The gold industry in Chile), by Augusto Orrego Cortés, 1890.

No. 2545—"Datos sobre la minería de la provincia de Coquimbo" (Notes on the mining industry in the Province of Coquimbo). 1894.

No. 2546—"Compañía Explotadora de San Bartolo" (San Bartolo Working Company). 1888.

No. 2547—"Minas Descubridoras de Caracoles. Memorias de la Junta Directiva á los dueños de barras." ("Descubridoras" mines of Caracoles. Report from the Board of Directors to mine owners). 1873 to 1879, 1884 to 1893 and 1895 to 1899.

No. 2548—"Catalogue de la Collection Minerallogique du Chile a l' Exposition Universelle de Paris, 1889" (Catalogue of the Chile Mineralogical Collection at the Paris Universal Exposition).

No. 2549—"Catálogo oficial de la Exposición de Minería y Metalurjía en Santiago de Chile, 1894 (Official Catalogue of the Mining and Metallurgy Exposition at Santiago).

No. 2550—"Revista de la Exposición de Minería y Metalurjía en Santiago de Chile, 1894" (Review on the Mining and Metallurgy Exposition at Santiago).

No. 2551—"La Exposición de Minería y Metalurjía de 1894" (The Mining and Metallurgy Exposition of 1894), by Santiago M. Basurco.

No. 2552—"La Exposición de Minería y Metalurjía de 1894" (The Mining and Metallurgy Exposition of 1894), by Luis L. Zegers.

No. 2553—"Fomento de la Industria Salitrera" (Promotion of the nitrate of soda industry). 1887.

No. 2554—"Conferencia sobre la industria salitrera" (Conference on the nitrate of soda industry), by Manuel José Vicuña, 1894.

No. 2555—"Reglamento para la Escuela Práctica de Mineria de Santiago" (Rules and Regulations for the Mining School of Santiago). 1898.

No. 2556—"Programa de los ramos que se estudian en la Escuela de Minería de Santiago" (Plan and program of studies in the Mining School of Santiago). 1899.

No. 2557—"Reglamento para el laboratorio de ensayes metalúrjicos anexo á la Escuela Práctica de Minería de Santiago" (Rules and Regulations for the laboratory of metallurgical assays annexed to the Mining School of Santiago). 1898.

No. 2558—"Guia para el análisis cualitativo de los cuerpos inorgánicos" (Guide for the qualitative analysis of inorganic compounds, translated into Spanish by Enrique Stüven). 1891.

No. 2559—"Código de Minería de la República de Chile" (Mining Code of the Republic of Chile). 1888.

No. 2560—"Estudio comparado del Proyecto de Reforma del Código de Minería" (Comparative study on the proposed reforms in the Mining Code), by José Ravest, 1888.

No. 2561—"Proyecto de Ley de Minería" (Proposed mining law), by Vicente Quezeda, 1864.

No. 2562—"Proyecto de Reglamento General de Minas" (Proposed General Regulations on the Mining Industry).

No. 2563—"Revista Comercial é Industrial de Minas Publicación Mensual" (Commercial and industrial monthly review on mines). 1901.

No. 2564—"La producción de oro, plata y cobre en Chile desde los primeros días de la conquista hasta finesde agosto de 1894" (Gold, silver and copper production in Chile from the early days of the Spanish Conquest up to August of 1894), by Alberto Hermann, 1894.

No. 2565—"Código de Minería de la Répública de Chile, comentado y anotado" (Mining Code of the Republic of Chile, with notes and explanations), by Robustiano Vera, 1897.

No. 2566—"Lijeras consideraciones en pro de la industria minera y su legislación" (Observations on the mining industry and its legislation). 1885.

No. 2567—"Viaje de instrucción á Antofagasta" (An educational trip to Antofagasta.

No. 2568—"Estudio sobre el Mineral de Caracoles, por Felipe Labastie, Santiago, 1901" (Study on the mineral district of Caracoles).

DIVISION IX.

MACHINERY.

GROUP 64.

GENERATION AND TRANSMISSION OF POWER.

CLASS 225—Machinery, Apparatus, Methods and Appliances for Generating, Controlling and Condensing Steam.

LASO, J., Tadeo. Santiago.

No. 2569—Economical hearth "Victoria."

CLASS 228—Power Transmission, Methods, Appliances, Means and Accessories.

COMPANIA FERROCARIL DE COPIAPO. Caldera.

No. 2570—Twelve spur wheels.
No. 2571—Two bevel wheels.
No. 2572—Three bevel pinions.
No. 2573—Mitre wheel.
No. 2574—Fifteen rope pulleys.
No. 2575—Five belt pulleys.
No. 2576—Three pedestals.
No. 2577—Five axle boxes.
No. 2578—Collection of cup saucer guide pulleys (diameter from 4 to 9 inches).

STRICKLER & KUPFER, Hermanos, "Fundicion Libertad." Santiago.

No. 2579—Buttress for friction.

FUENZALIDA, José Salustio. Valparaiso.

No. 2580—Patent pulley.

GROUP 65—APPARATUS AND MEANS FOR CONTROLLING, CONVEYING AND MEASURING AIR, GASES AND LIQUIDS.

CLASS 230—Pumps and Pumping Engines, Meters, Filters and Appliances.

STRICKLER & KUPFER, Hermanos, "Fundicion Libertad." Santiago.

No. 2581—High pressure pump.

CLASS 233—Piping and Tubing, Pipe Fixings and Appliances.

STRICKLER & KUPFER, Hermanos, "Fundicion Libertad." Santiago.

No. 2582—Collection of 90 brass cocks.

GROUP 68.

MACHINES AND TOOLS FOR WORKING METALS.

CLASS 246—Machines, Tools and Appliances for Working Cold Metals.

PARQUE Y MAESTRANZA DEL EJERCITO (Arsenal and Army Workshops). Santiago.

No. 2583—Automatic lathe with secondary transmission.

No. 2584—Set of fourteen wheels of different diameters for screws and threads.

No. 2585—Board with complete set of implements used in the manufacture of shells, bullets, caps, etc.

No. 2586—Wooden shield, showing different stages in the process of manufacturing Mauser ammunition, Hotchkiss caps, powder, etc.

GROUP 70—MISCELLANEOUS MACHINERY.

CLASS 254—Automatic Machinery for Special Purposes.

DEBUYSERE, Carlos. Santiago.

No. 2587—Finger exercising machine.

GROUP 71—MACHINES, TOOLS AND APPLIANCES FOR SPECIAL PURPOSES.

CLASS 271—Machinery and Appliances for Preparing, Bottling and Corking Mineral Waters.

COUSIÑO, Carlos. Santiago.

No. 2588—Jars for liquid carbonic acid.

MACHINERY EXHIBIT.

DIVISION X.

ELECTRICITY AND ELECTRICAL APPLIANCES.

GROUP 74—ELECTRO-CHEMISTRY.

CLASS 279—Primary Batteries.

TALLER TELEGRAFICO DE LOS FERROCARRILES DEL ESTADO (State Railroads Telegraph Workshops). Santiago.

No. 2589—Six batteries with porous bags.
No. 2590—Four dry batteries, Chile model.

CLASS 280—Secondary or Storage Batteries.

TALLER TELEGRAFICO DE LOS FERROCARRILES DEL ESTADO. Santiago.

No. 2591—Four plates without paste, for accumulator.
No. 2592—Four plates with paste, for accumulator.
No. 2593—Accumulator for 200 ampers hour.
No. 2594—Accumulator for 1,000 ampers hour.

GROUP 75—ELECTRIC LIGHTING.

CLASS 286—Regulating and Controlling Devices.

TALLER TELEGRAFICO DE LOS FERROCARRILES DEL ESTADO. Santiago.

No. 2595—Key for two connections, 25 ampers, for electric light circuits.
No. 2596—Single, 100 ampers, knife switch for electric light circuits.

GROUP 76—TELEGRAPHY AND TELEPHONY.

CLASS 288—Telegraphic Instruments, Transmitters, Receivers and Recording Apparatus.

TALLER TELEGRAFICO DE LOS FERROCARRILES DEL ESTADO. Santiago.

No. 2597—Two galvanometers.
No. 2598—Two disks for telegraph paper.
No. 2599—Two telegraph keys. Model State Railways.
No. 2600—Two telegraph keys. French model.
No. 2601—Telegraph switch-board.
No. 2602—Student's telegraph key.

CLASS 291—Telephone Instruments, Transmitters, Receivers.

TALLER TELEGRAFICO DE LOS FERROCARRILES DEL ESTADO. Santiago.

No. 2603—Two telephones. Model of the State Railways.

No. 2604—Register for telephone stations.

No. 2605—Double key for bell, connection between station master and switchman.

No. 2606—Single key for bell, connection between station master and switchman.

CLASS 292—Switch-boards and Appliances.

TALLER TELEGRAFICO DE LOS FERROCARRILES DEL ESTADO. Santiago.

No. 2607—Two commutators for line testing.

No. 2608—Two commutators for repeater.

No. 2609—Two commutators for single connection.

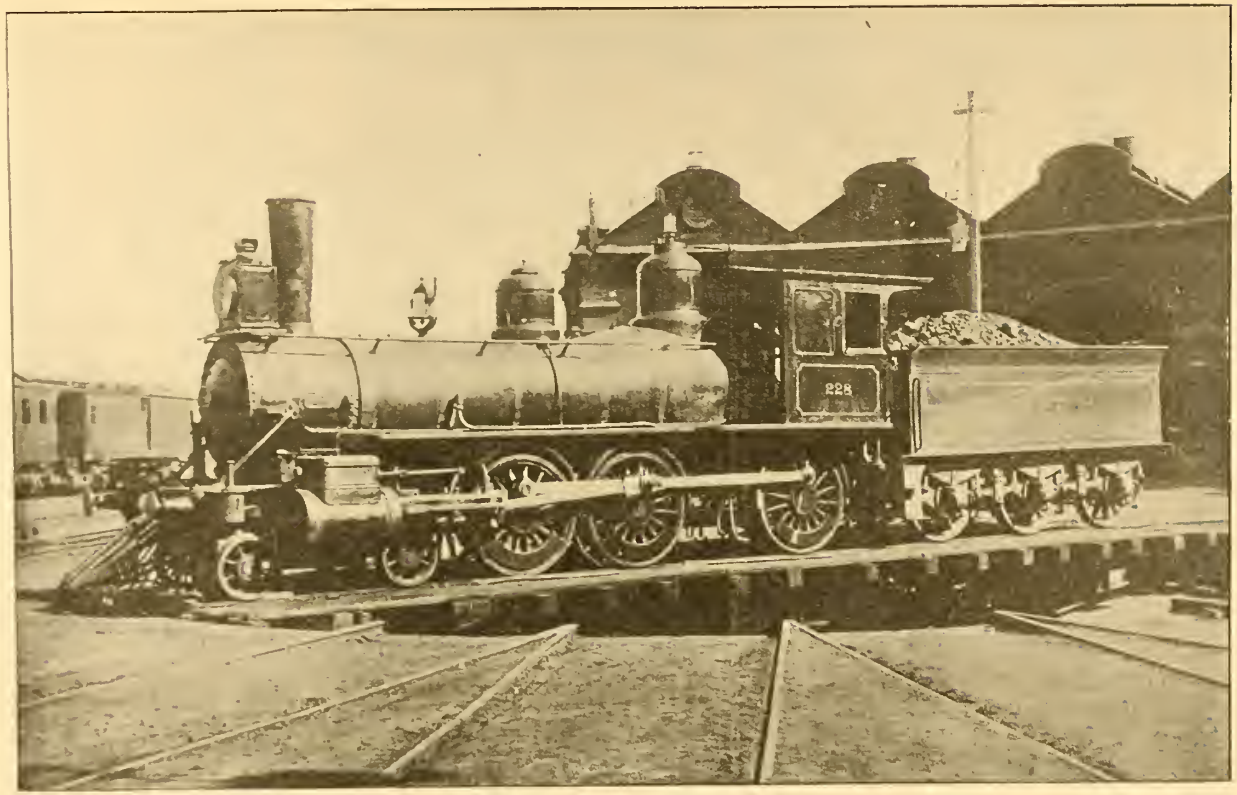
No. 2610—Batteries and line combined switch.

No. 2611—Two pole switches for dynamo switch-board.

CLASS 293—Safety Devices for Telephone and Telegraph Apparatus.

TALLER TELEGRAFICO DE LOS FERROCARRILES DEL ESTADO. Santiago.

No. 2612—Two lightning arresters.



LOCOMOTIVE MADE IN THE STATE RAILROAD WORKSHOPS.

DIVISION XI.

TRANSPORTATION—RAILWAYS, VEHICLES, VESSELS.

RAILWAYS.

GROUP 79—STANDARD AND NARROW GAUGE RAILWAYS, OPERATED BY STEAM.

CLASS 308—Railway Organization and Management.

COMMISSION OF CHILE. Santiago.

No. 2613—"Memoria anual presentada por el Director General de los Ferrocarriles del Estado," 1884 á 1899 (Annual report from the General Superintendent of State Railroads, 1884 to 1899). Sixteen volumes.

No. 2614—"Reglamento de transporte y tarifa de los Ferrocarriles del Estado, recopilados por Lupercio Fernández Vargas" (Rules and regulations of transportation and fares of the State railroads).

No. 2615—"Informe sobre garantía á la Empresa del Ferrocarril Trasandino" (Report on the security given the Ferrocarril Trasandino Company), by Sr. Enrique Budge.

No. 2616—"Informe de la Comisión de Ingenieros nombrada para inspeccionar las líneas de la Red Central de los Ferrocarriles del Estado" (Report from the Commission of Engineers appointed to inspect the tracks of the Central Line of the State railroads), 1901.

No. 2617—"Dictámen sobre el contrato de construcción de los Ferrocarriles del Estado" (Report on the contract for the construction of the State railroads), 1891.

CLASS 309—Material and Appliances Pertaining to the Permanent Way.

COMMISSION OF CHILE. Santiago.

No. 2618—Photographs of the railroad bridges over the Maule, Bio-Bio, Laja and Nuble rivers.

CLASS 310—Materials and Appliances Pertaining to Rolling Stock.

COMPANIA FERROCARRIL DE COPIAPO. Caldera.

No. 2619—Locomotive cylinders and covers.

No. 2620—Locomotive side rods.

No. 2621—Steam valve and pattern (4 inches).

No. 2622—Two chilled cast-iron car wheels, wrought-iron spokes.

No. 2623—Eleven car wheels.

MAESTRANZA DE LOS FERROCARRILES DEL ESTADO (State Railroads Workshops). Valparaiso.

No. 2624—Locomotive cylinder, 18 inches diameter.

MAESTRANZA DE LOS FERROCARRILES DEL ESTADO. Santiago.

No. 2625—Passenger car bogie.

CLASS 311—Railway Statistics, History, Literature and Relics.

COMMISSION OF CHILE. Santiago.

No. 2626—Estadística de los Ferrocarriles del Estado, desde 1887 hasta 1899 (Statistics of the State Railroads from 1887 to 1899). Thirteen volumes.

GROUP 80—SPECIAL ELEVATED, SURFACE AND UNDERGROUND RAILWAY SYSTEMS.

CLASS 313—Electric Railway System and Appliances.

COMMISSION OF CHILE. Santiago.

No. 2627—Chile Electric Tramway and Light Company, Limited (Documents), 1899.

CLASS 317—Traction Engines and Trains.

COMMISSION OF CHILE. Santiago.

No. 2628—"Copiapó" locomotive. The first exported by the United States, and the first to run on the Southern Hemisphere, on the Caldera and Copiapó Railroad Line. Year 1850. (On exhibition in Transportation Building.)

No. 2629—Tender of "Copiapó" locomotive (in the same building).

No. 2630—Photographs of two freight engines and one passenger and freight engine constructed in the workshops of the State railroads. Valparaiso.

No. 2631—Photographs of a passenger engine built by Lever, Murphy & Co. Caleta Abarca, Valparaiso.

No. 2632—Photographs of freight, gunpowder and passenger cars constructed for the State railroads, by Hardie & Co. Valparaiso.

VEHICLES.

GROUP 81—WHEELED VEHICLES OF TRANSPORTATION FOR PERSONAL USE.

CLASS 318—Bicycles and Appurtenances.

COPETTA, Hermanos. Santiago.

No. 2633—Chainless bicycle.

TISNE, Bertrand. Santiago.

No. 2634—Bicycle.

No. 2635—Frame for chainless bicycle.

GROUP 82 —WHEELED VEHICLES FOR HORSE-POWER.

CLASS 322—Pleasure Vehicles.

BARDEAU, Hermanos. Santiago.
No. 2636—Victoria.

THIEME & LIEBE. Santiago.
No. 2637—Victoria.

HERMAN, Julian. Concepción.
No. 2638—Road-cart.

CLASS 327—Wagon and Carriage Hardware Furnishing and Supplies.

COMPAÑIA DEL FERROCARRIL DE COPIAPO. Caldera.
No. 2639—Nineteen cart hubs, with plate and cap.

DOUZET, Eujenio. Santiago.
No. 2640—Carriage wheel.

COMMISSION OF CHILE. Santiago.
No. 2641—Two carriage wheels, from Angol.

CLASS 328—Harness, Saddles, Whips, Robes, Accessories.

COUDEU, Camalez Hermanos. Santiago.
No. 2642—Harness, double set.
No. 2643—Saddle, calf leather (round shape) with accessories.
No. 2644—Saddle, Morocco leather (square shape).
No. 2645—Saddle, pig skin, embroidered (square shape).
No. 2646—Saddle, pig skin (English shape).
No. 2647—Four bridles and reins.
No. 2648—Spur supporters, six pairs.
No. 2649—Spurs, of metal and of silver.

COMMISSION OF CHILE. Santiago.
No. 2650—Cowboy's saddle, with accessories.
No. 2651—Two bridle reins, broidered hide.
No. 2652—Two leather covers for saddle.

DAVISON, Guillermo. Chillan.
No. 2653—Bridle reins, broidered hide.

CLASS 329—Saddlery Hardware.

COUDEU, Camalez Hermanos. Santiago.
No. 2654—Two Chilean silver bits, silver inlaid.

COMMISSION OF CHILE. Santiago.
No. 2655—One Chilean bit, silver inlaid.

CLASS 330—Appliances for the Stable and for the Care of Horses and Vehicles.

COUDEU, Camalez Hermanos. Santiago.
No. 2656—Two broidered hat boxes.

DIVISION XII.

ORDNANCE AND MUNITIONS OF WAR.

GROUP 88—ORDNANCE.

CLASS 353—Artillery.

PARQUE Y MAESTRANZA DEL EJERCITO (Arsenal and Army Workshops). Santiago.

No. 2657—Gun carriage for landing marine field gun, with ammunition box, utensils and accessories.

ARSENALES DE MARINA (Navy Arsenal). Valparaiso.

No. 2658—Badge-block for target practice (76 mm. cannon).

CLASS 354.—Small Arms for Military or Civillian's Use.

PARQUE Y MAESTRANZA DEL EJERCITO (Arsenal and Army Workshops). Santiago.

No. 2659—Collection of Mauser rifles, Chile model; carbines—Mauser; cavalry swords and lances.

Presented as models of the small arms used by the Army.

INTENDENCIA GENERAL DEL EJERCITO (General Commissariat). Santiago.

No. 2660—Models of swords used by the army.

CLASS 355—Ammunition, Fixed or Separate.

PARQUE Y MAESTRANZA DEL EJERCITO (Arsenal and Army Workshops). Santiago.

No. 2661—Ball cartridges for Mauser rifle, Chile model.

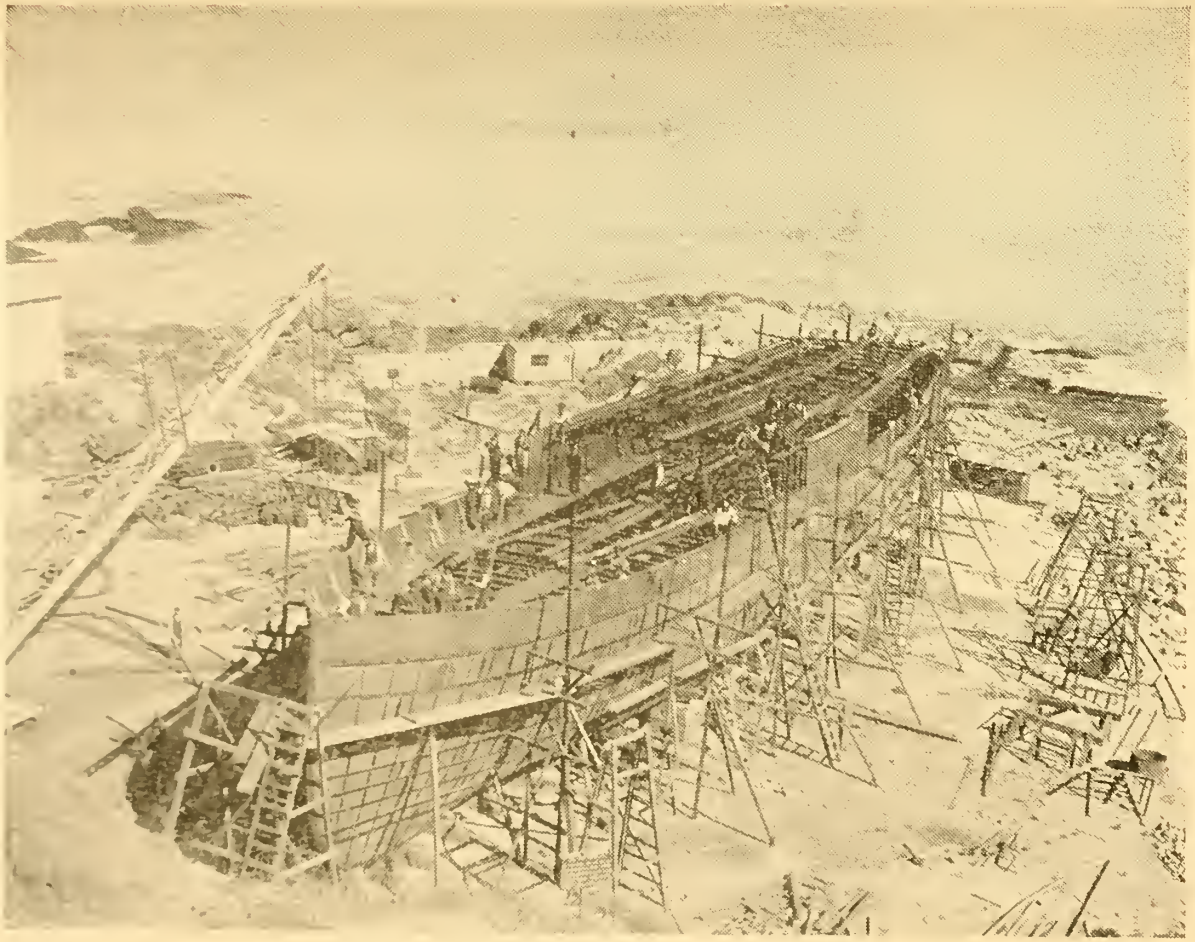
ARSENALES DE MARINA (Navy Arsenal). Valparaiso.

No. 2662—Models of steel and iron shells; steel and iron common balls; full charges for battle and reduced charges; metallic cartridges; waddings; lubricators; canister for Gatling gun; percussion fuses; time fuses; electric tubes and percussion tubes.

Presented to show the materials used by the Navy.

CLARK, JUAN E. Valparaiso.

No. 2663—Six shot samples.



STEEL STEAMSHIP OF 1,000 TONS.
At Lever, Murphy & Co.'s Works, Valparaiso.

CLASS 356—Pyrotechnics.

ARSENALES DE MARINA (Navy Arsenal). Valparaiso.

No. 2664—Collection of powders: Pebble selected; prismatic cacao; black prismatic and cordite.

Presented to show the powders used by the Navy.

JONES & Co. San Bernardo, Victoria.

No. 2665—Blasting powder.
No. 2666—Sporting powder.
No. 2667—Rifle powder.

CLASS 357—Arsenal Tools.

ARSENALES DE MARINA (Navy Arsenal). Valparaiso.

No. 2668—Wrench for powder tank.
No. 2669—Fitter for percussion tube.

PARQUE Y MAESTRANZA DEL EJERCITO (Arsenal and Army Workshops). Santiago.

No. 2670—Case with tools and implements for testing Mauser cartridges.

CLASS 358—Ordnance Equipment for Military or Civilians' Uses.

PARQUE Y MAESTRANZA DEL EJERCITO (Arsenal and Army Workshops). Santiago.

No. 2671—Complete harness for three teams and mounted chief (4 saddles), for field gun.
No. 2672—Pack-saddle complete for mountain artillery.
No. 2673—Mauser equipment, complete.
No. 2674—Mannlicher equipment, complete.
No. 2675—Various equipments.
No. 2676—Pack-saddles for cases.
No. 2677—Various: Cross belt; cross belt for cartridges; knapsack.

INTENDENCIA DEL EJERCITO (General Commissariat). Santiago.

No. 2678—Pack-saddle, complete.
No. 2679—Set harness for three mules.

ARSENAL DE MARINA (Navy Arsenal). Valparaiso.

No. 2680—Complete equipment for seaman.

GROUP 89—ENGINEERING.

CLASS 359—Fixed Defenses and Accessories.

ARSENALES DE MARINA (Navy Arsenal). Valparaiso.

No. 2681—Explosive grappling iron, empty, 1 kilogram charge.
No. 2682—Sub-marine mine, empty, electro contact, for 34½ kilograms charge.

Presented to show the materials used by the Navy.

GROUP 90—QUARTERMASTER'S MATERIALS.

CLASS 361—Vehicles.

STYLES & CO., "Taller del Condor." Santiago.

No. 2683—Field litter.

CLASS 362—Clothing.

INTENDENCIA GENERAL DEL EJERCITO (General Commissariat). Santiago.

No. 2684—Dress uniform for artillery lieutenant.
No. 2685—Dress uniform for infantry, second lieutenant.
No. 2686—Dress uniform for lieutenant of military engineer's staff.
No. 2687—Dress uniform for first surgeon.
No. 2688—Dress uniform for first accountant.

CLASS 363—Camp Equipment.

INTENDENCIA GENERAL DEL EJERCITO (General Commissariat). Santiago.

No. 2689—Officers' tent, with two chairs and table.
No. 2690—Individual tents, complete.
No. 2691—Mattress and cover; pillow and cover.
No. 2692—Infantry and cavalry supplies bag.
No. 2693—Dinner utensils; canteen.
No. 2694—Officers' cots.

CLASS 364—Quartermaster Equipment—Hammers, Saddles, etc.

INTENDENCIA GENERAL DEL EJERCITO (General Commissariat). Santiago.

No. 2695—Rope lariat; horse brush; vegetable fibre brushes; horse-hair brushes.

GROUP 91—COMMISSARY MATERIALS.

CLASS 365—Commissary Stores.

INTENDENCIA GENERAL DEL EJERCITO (General Commissariat). Santiago.

No. 2696—Underwear (2 pieces).
No. 2697—Canvas blouse and trousers; blouse for work; cap with double cover; cap and cotton gloves; scarf.
No. 2698—Calvary "poncho" (blanket) of baize; woolen "poncho"; water-proof "poncho," with hood; woolen blanket.
No. 2699—Overcoats.
No. 2700—Combs for caps and helmets.
No. 2701—Artillery uniform.
No. 2702—Infantry uniform.
No. 2703—Cavalry uniform.
No. 2704—Military engineers' uniform.
No. 2705—Collection of emblems.
No. 2706—Cavalry and infantry boots.
No. 2707—Tan buckle-shoes and "American" model shoes; hempen sandals.
No. 2708—Officers' blouse; officers' cloth and linen caps; overcoat case.

CLASS 366—Commissary Equipment.

INTENDENCIA GENERAL DEL EJERCITO (General Commissariat). Santiago.

No. 2709—Iron bedstead for soldiers.

No. 2710—Portable stove.

GROUP 94—HISTORY AND LITERATURE.

CLASS 379—Military Literature.

ESTADO MAYOR GENERAL DEL EJERCITO (General Staff of the Army). Santiago.

No. 2110a—Collection of military albums.

COMMISSION OF CHILE. Santiago.

No. 2711—Ordenanza General del Ejercito, recopilaciones de leyes decretos, reglamentos y demas disposiciones supremas referentes al Ejercito, seis volúmenes (Military Code and Regulations, six volumes).

No. 2712—Memorias del Ministerio de Guerra correspondientes a los años de 1895 a 1900, seis volúmenes (War Department Annual Reports).

No. 2713—Reglamentos de Tiro y de Esgrima para el Ejercito, tres volúmenes (Instruction for Target Practice and Fencing).

No. 2714—Textos de Táctica y Estratejia traducidos para el servicio del Ejercito, dos volúmenes (Text-books on Tactics and Strategy).

No. 2715—Estudios sobre hijiene y servicio sanitario militar por el Doctor Conrado Rios V., dos volúmenes (Studies on Military Hygiene and Sanitary Service).

No. 2716—Estudios sobre calzado militar de infanteria por el Doctor Conrado Rios V. (A Study on the Infantry Foot-gear).

No. 2717—Reglamentos para el servicio sanitario del Ejercito en campaña, 1879 (Sanitary Service Regulations).

No. 2718—Jeografia Militar de Chile por J. Boonen Rivera, 1898 (Military Geography of Chile).

No. 2719—Album Militar de Chile, desde 1910 hasta 1879, por Pedro Pablo Figueroa (Military Album of Chile).

No. 2720—Miscelánea Militar, por Arturo Rojas Arancibia, 1900 (Military Miscellany).

No. 2721—Descripcion y pruebas sobre los cañones Krupp y Bange, dos volúmenes (Krupp and Bange Guns, Description and Trial Tests).

No. 2722—Balística Elemental, por Baldomero Drenteln, 1899 (Elementary Ballistics).

No. 2723—Prontuario de los Juicios Militares por Robustiano Vera, 1891 (Hand-book for Court-martial).

Naval Literature.

COMMISSION OF CHILE. Santiago.

No. 2724—Reglamento de Sanidad Marítima, 1895 (Sanitary Maritime Regulations).

No. 2725—El Puerto de Talcahuano y sus obras de mejoramiento, por Alberto Fagalde, 1895 (Talcahuano Bay and improvements thereon).

No. 2726—Historia Naval y Bibliografia Maritima, cuatro volumenes (Naval History and Bibliography).

No. 2727—Relaciones Jeógraficas é Hidrógráficas y Biblioteca Jeográfica é Hidrógráfica de Chile, por Nicolas Anrique R. (Geographical and Hydrographical Reports and Bibliography).

OFICINA HIDROGRAFICA (Hydrographical Office). Valparaiso.

No. 2727a—Albums of views of ports and men-of-war.

No. 2728—Anuario Hidrógráfico de la Marina de Chile, desde 1875 hasta 1900, 22 volúmenes (Annual Reports of the Hydrographíc Bureau of Chile).

No. 2729—Noticias Hidrógráficas, desde 1874 hasta 1900, veintisesis volúmenes (Hydrographical Informations).

No. 2730—Estudios Hidrógráficos, dos volúmenes (Hydrographical Surveys).

No. 2731—Esploraciones Hidrógraficas, cuatro volúmenes (Hydrographical Explorations).

No. 2732—Derroteros de Magallanes, Perú y Bolivia, del Plato y varios otros, cinco volúmenes (Navigation Courses).

No. 2733—Jeografía Náutica de Chile, el Perú y la República Arjentina, cuatro volúmenes (Nautical Geography).

No. 2734—Historia Náutica de Chile, cuatro volúumenes (Naval History of Chile).

No. 2735—Obras diversas de Literatura Naval, tres volúmenes (Collection of Maritime Studies).

MINISTERIO DE MARINA (Navy Department). Santiago.

No. 2736—Memoria presentada al Congreso Nacional por el Ministro de Marina, desde 1880 a 1899, 19 volúmenes (Reports of the Navy Department).

No. 2737—Manual del Marino, Recopilacion de Leyes, decretos y órdenes de referentes a la Marina Chilena, 1817 a 1897, 9 volúmenes (Hand-book of the laws and by-laws of the Chile Navy).

DIRECCION JENERAL DE LA ARMADA (General Direction of the Navy). Valparaiso.

No. 2738—Ordenes Generales y Circulares, 1887 á 1900, 5 volúmenes (General Orders and Circulars).

No. 2739—Derecho y Lejislacion Maritima, cinco volúmenes (Maritime Laws).

No. 2740—Policia y Servicios Marítimos, cinco volúmenes (Maritime Patrol Service).

No. 2741—Telegrafia, Fortificacion, Torpedos y Construcciones Navales, ocho volúmenes (Signals, Torpedos, Defense and Ship Building).

No. 2742—Artilleria Maritima, cinco volúmenes (Navy Artillery).

No. 2743—Táctica, Estratejia y Maniobras Navales, nueve volúmenes (Maritime Tactics, Strategy, etc.).

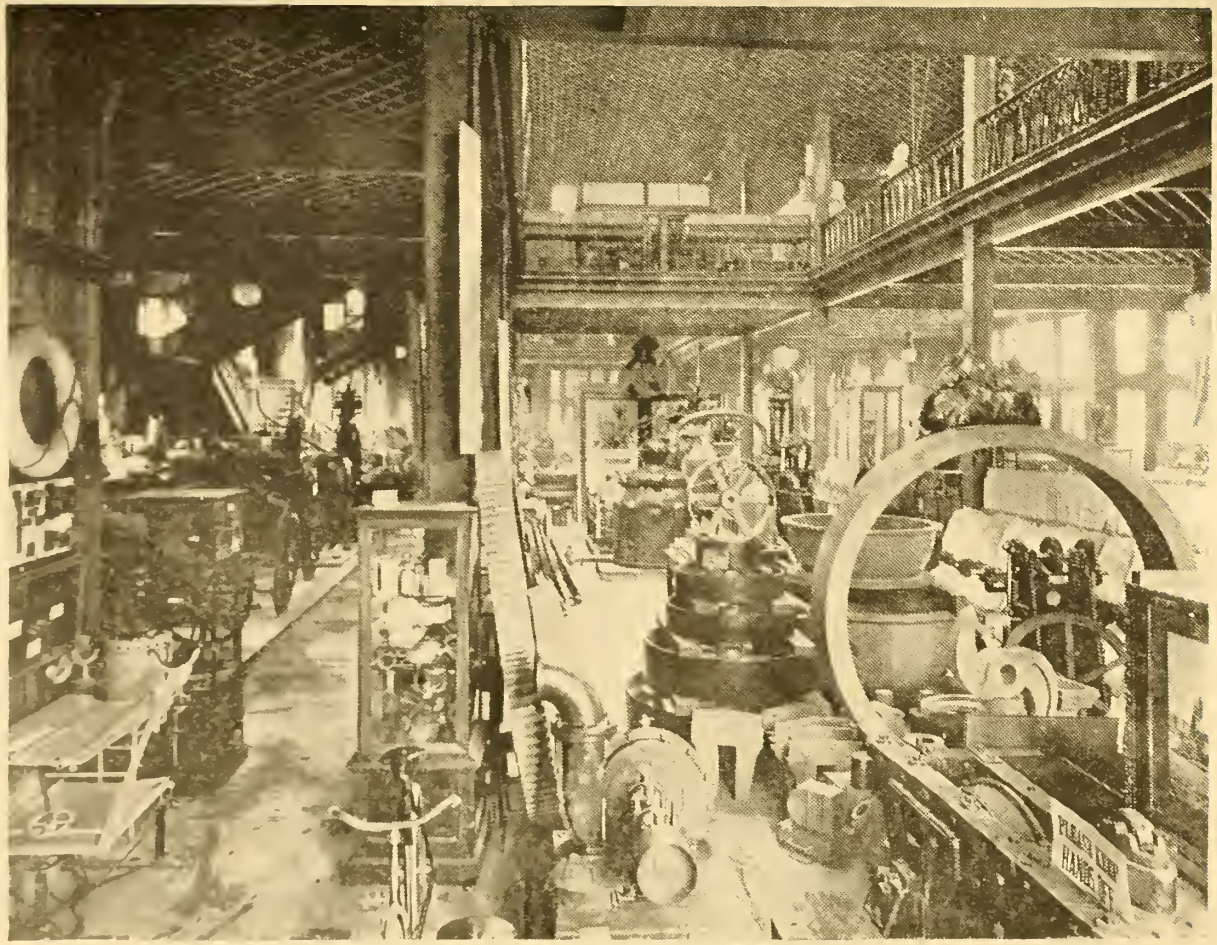
No. 2744—Estudios Cientificos aplicados a la Marina Militar, cuatro volúmenes (Scientific Studies regarding the Military Navy).

No. 2745—Tratado de Hidrografia por Lindor Perez G., 1897 (A Treatise on Hydrography).

No. 2746—Los Oríjenes de Nuestra Marina Militar, por Luis Uribe Orrego, tres volúmenes (The Origin of the Chile Navy).

CIRCULO NAVAL. Valparaiso.

No. 2747—Revista de Marina, publicacion mensual, 1885 a 1900, 30 volúmenes (Navy Monthly Review).



MANUFACTURES EXHIBIT.

DIVISION XIII.

MANUFACTURES.

GROUP 95—CHEMICALS AND DRUGS.

CLASS 381—Drugs, Pure and Compounded.

LABORATORIO CHILE. Brand, Bouey & Janke. Santiago.

No. 2748—Syrups: Chloride phosphate of lime, sarsaparilla, iodated radish, orange peel, sesquibromide of iron, iodate of iron, hypophosphite compound of lime, tar, tannic iodine, lactophosphate of lime, pure iodated sea-pine, chloral.

No. 2749—Elixirs: Calcium iodate, kola, orange, pepsin chloridric, "Garus."

No. 2750—Citrates: Of magnesia, of lithia, of granulated magnesia.

No. 2751—Liquors: Peptonated iron, manganese, dialysed iron.

No. 2752—Wines: Quina, kola, peptonized, tannic iodine.

No. 2753—Composed tablets: Chlorate of potash, hemol, bromide of potash, bicarbonate of soda, cascara (extract), cascara (powdered extract), cascara (powder), jalap and calomel, rhubarb, permanganate of potash, calomel, charcoal.

No. 2754—Fluid extracts: Ratany, hamamelis, cimaruba, orange peel, quebracho, licorice, senna, condurango, sarsaparilla, soap-bark, quina, valeriana, ginseng, kola, poligala, cascara, coca, cuasia, ipecacuan, boldo, metrun, hydrastis, rhubarb, cinnamon.

No. 2755—Tablets: Tolu, santonine, rose, peppermint, charcoal, vichy (bicarbonate), ipecacuan, chlorate of potash.

No. 2756—Hypodermic injections: Morphine, bioxide of mercury, ergotine.

No. 2757—Granulated: Kola glycero-phosphate of lime, rhubarb and soluble granulated quina.

No. 2758—Concentrated drops of peptonate of iron, neurosine, gum-drops, iodite of iron pills, quina, lactucarium paste, lactopeptona, belena oil, soothing balsam, elatine, belladonna oil.

No. 2759—Various: Creosoted glycerine, phenol sodaic.

LABORATORIO ESCUDO DE CHILE. E. Villaroel, proprietor. Santiago.

No. 2760—Syrups: Pectoral, chlorophosphate of lime, creosoted arsenic, arsenic guayacolate, creosoted guayacolate, iodite of iron, guilliermond, pure iodated.

No. 2761—Wines: Quina, kola, quinium.

No. 2762—Soluble granulated gensing, quina, kola, hops, rhubarb.

No. 2763—Soluble granulated colombo and coca.

No. 2764—Granulated bromide of potassium, condurango, phospho-glycerate of lime, caruina, violets.

No. 2765—Various: Hypophosphite compound, phosphoglycerate of lime (neurosine), hydrate of chloral, tar liquor, creosoted glycerine, cod-liver-glycerine emulsion, kola elixir, phénol sodaic, hydrate of magnesia, fenosalillo (antiseptic), digestive capsules, influencina capsules, varnish for pills, remedy for warts, salipirina, universal corn remedy, toothache drops.

PEREZ, Marcos. La Serena.

No. 2766—Syrups of: Hypophosphite of lime, lactophosphate, compound hypophosphites, chlorophosphate of lime, iodate of iron, iodized radish, orange peel and bromide of potassium.

No. 2767—Tar liquor.

No. 2768—Granulated neurosine, kola, boldo.

No. 2769—Bees-wax, bleeched.

GUAJARDO, Amador. Iquique.

No. 2770—Granulated quina, coca, kola, pepsin, boldo, magnesia, pichi, quina, lampaya, buchu, glycerophosphate of sodium, neurosine, extra neurosine, cascara, kola nut, neurosine and kola, magnesia, bicarbonate of soda, coca, subnitrate of bismuth, mate, carbonate of creosote, coffee, condurango, vegetable charcoal, paico, rhubarb.

HÄBERLE, Hermanos. Drogueria Alemana. Santiago.

No. 2771—Granulated products: Charcoal, neurosine, iron, pepsin, kola, quina.

No. 2772—Various: Anisillo purge, citrate of magnesia, hemoglobina, kola and glycerophosphate of lime, antiseptic elixir, kola elixir, tar liquor, emulsion of cod-liver oil and hypophosphites, granulated neurosine.

No. 2773—Wines: Lactophosphate of lime; quina.

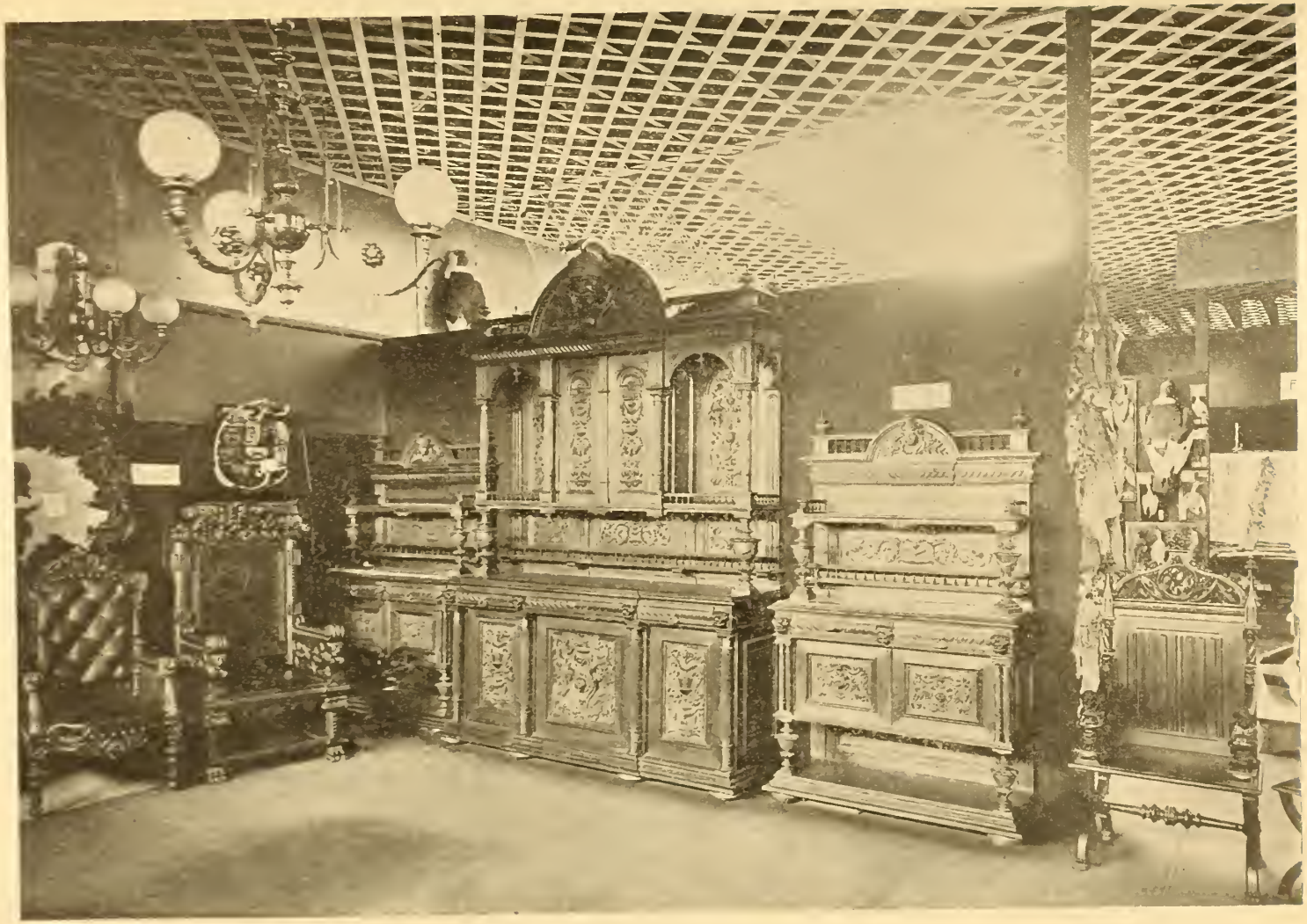
No. 2775—Syrups: Sesquibromide of iron, iodated radish, hypophosphites, creosoted chloridephosphate of lime, guayacolated chloridephosphate of lime.

DEL CAMPO, Francisco. Santiago.

No. 2776—Pectoral of Maní.

BARRIENTOS, E. Santiago.

No. 2777—Paicolina.



ART FURNITURE EXHIBIT.

CLASS 382—Chemists and Druggists' Supplies and Equipments.

RODIGER, Otto. Santiago.

No. 2778—Trusses, various kinds.
No. 2779—Umbilical belt.
No. 2780—Seirenolud.
No. 2781—Artificial foot.
No. 2782—Orthopedic corset.
No. 2783—Leg supporter.
No. 2784—Leg and foot supporter.

COMMISSION OF CHILE. Santiago.

No. 2785—Woolen filters.

GROUP 97.

SOAPS, ESSENCES, PERFUMERY AND TOILET ARICLES

CLASS 387—Soaps, Pomades and Cosmetics.

CAUQUELIN, E. Valparaiso.

No. 2786—Toilet soaps: Rose, Honey, Ladies', Bran, Lovers', Milk, Hygiene.

COMMISSION OF CHILE. Santiago. Products of the soap factory, "Jaboneria y Perfumeria del Progreso," of Santiago:

No. 2787—Toilet soaps: Family, Fine, Glycerine, Iron, Hygiene, Mignonette, Rose, Heliotrope, Musk, Verbena, Orange, Bran, Honey, Milk, Camelia, Violet, Universal.
No. 2788—Medicinal soaps, disinfectant.

KOCK, H. Valdivia.

No. 2789—Laundry soaps, two classes.

GEIGER & CO. Valparaiso.

No. 2790—Nard cream.
No. 2791—"Maravilloso" balsam.
No. 2792—"Dejadme en paz" balsam.

CLASS 388—Essential Oils, Essences and Perfumery, Flavoring Extracts.

GEIGER & CO. Valparaiso.

No. 2793—Florida water.
No. 2794—Nard extract.

CAUQUELIN, E. Valparaiso.

No. 2795—Cologne water: Extra, Ambré, Superior.
No. 2796—Vegetable lotions: Violet, Heliotrope, Rose, Nard, Rose of Portugal, Ylang-ylang.

LABORATORIO ESCUDO DE CHILE. E. Villaroel, proprietor. Santiago.
No. 2797—Cologne water.

HÄBERLE, Hermanos. Drogueria Alemana. Santiago.
No. 2798—Cologne water.

CLASS 389—Toilet Articles.

CAUQUELIN, E. Valparaiso.
No. 2799—Rice powders: Common, magnolia.
No. 2800—Dentifrice.
No. 2801—Toilet vinegar; quinine hair tonic.

LABORATORIO ESCUDO DE CHILE. E. Villaroel, proprietor. Santiago.
No. 2802—Dentifrices: Sozodont, Dentol and Odonto.

GEIGER & CO. Valparaiso.
No. 2803—Nard face powder.

HÄBERLE, Hermanos. Drogueria Alemana. Santiago.
No. 2804—Toilet vinegar; quinine hair tonic.

CLASS 390—Barbers and Hairdressers' Supplies and Equipments.

AVARIA, Romulo. Talca.
No. 2805—Combs of bone and wood.

GROUP 98.

TRAVELING, CAMPING AND SPORTING APPARATUS.

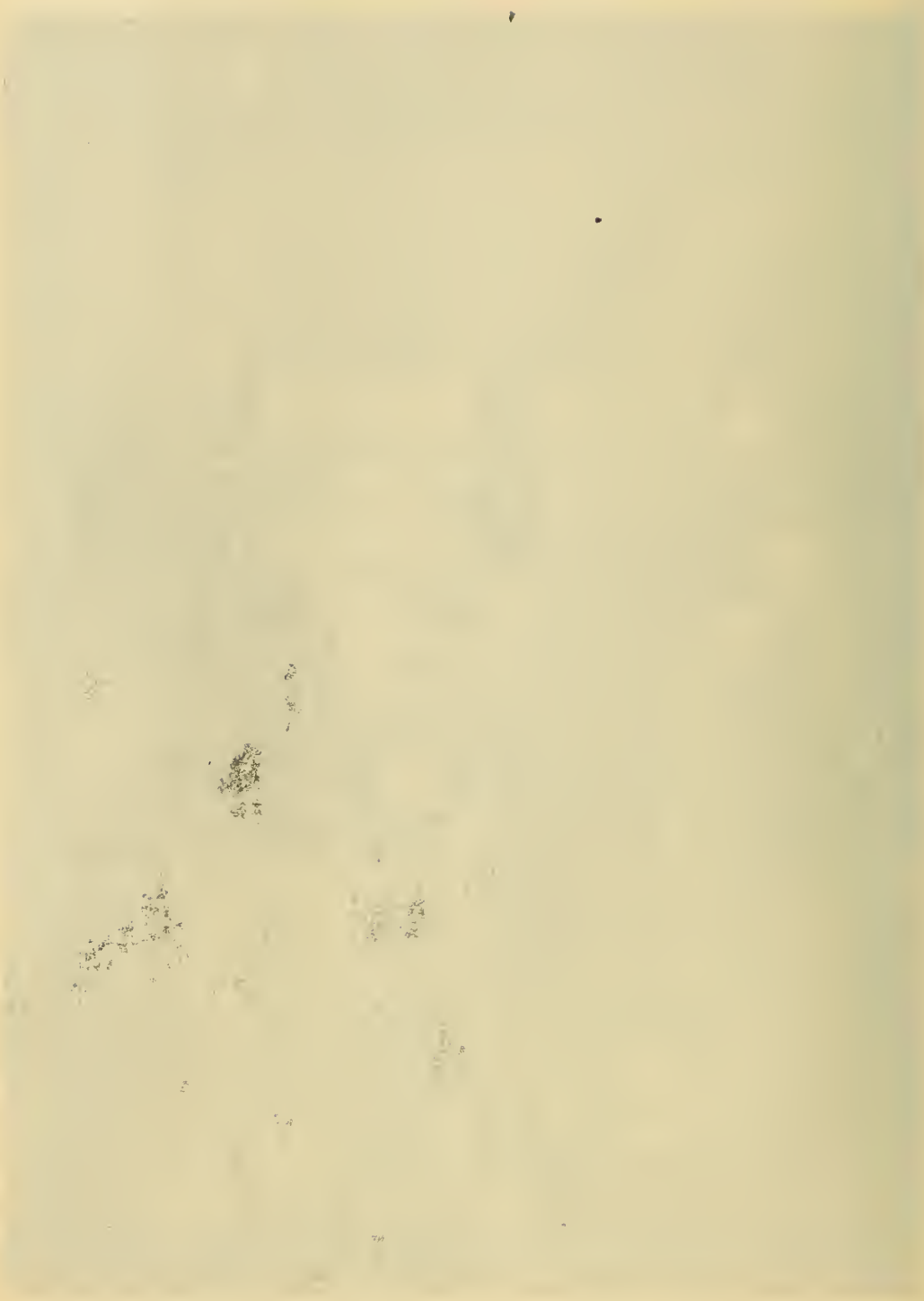
CLASS 391—Trunks, Valises, Bags, Straps, etc.

BATMALE & CO. Santiago.
No. 2806—Trunk, sole leather, round top.
No. 2807—Trunk, tan leather, round top.
No. 2808—Trunk, canvas, round top.
No. 2809—Trunk, leather, round top.
No. 2810—Valise, leather.
No. 2811—Valise, yellow leather.
No. 2812—Valise, calf leather.
No. 2813—Hand-bag, morocco leather.

CLASS 393—Sporting Goods of all Varieties.

ARAVENA, Jovino. Santiago.
No. 2814—Small kegs, for hunters.

ART FURNITURE EXHIBIT.



GROUP 99—FURNITURE AND INTERIOR DECORATIONS.

CLASS 395—Chairs, Tables and other Furniture.

COMMISSION OF CHILE. Santiago.

Made by José Favillini é Hijos, Santiago:

No. 2815—Bedroom suit of maple: Wardrobe, washstand and night-table.

Made by José Lizarralde, Valparaiso:

No. 2816—Side-board, carved walnut.

No. 2817—Two side tables, carved walnut.

STRAPPA & CO. Valparaiso.

No. 2818—Arm chair, carved, Gothic style.

No. 2819—Arm chair, carved, Louis XV. style.

No. 2820—Arm chair, carved.

No. 2821—Arm chair, upholstered, Louis XV. style.

No. 2822—Chair, upholstered, Gothic style.

No. 2823—Chair, upholstered, Louis XV. style.

No. 2824—Arm chair, upholstered, morocco, Rénaissance style.

No. 2825—Center table, carved walnut.

No. 2826—Book case, carved walnut.

CLASS 396—Decorative Furnishings, Mirrors.

STRAPPA & CO. Valparaiso.

No. 2827—Picture frame, carved.

No. 2828—Carved screen, hand painted.

No. 2829—Cabinet, enameled.

MODER, é Hijo, Antonio. Santiago.

No. 2830—Gilt table.

No. 2831—Picture frame, plush covered.

No. 2832—Picture frame, oval.

No. 2833—Picture frame, walnut, with gilt beading.

No. 2834—Picture frame, walnut, with bronze beading.

No. 2835—Picture frame, gilt and bronze.

No. 2836—Picture frame, gilt, carved.

No. 2837—Picture frame, gilt, with plush beading.

No. 2838—Samples of mouldings.

GALLOT, Alberto. Santiago.

No. 2839—Frame, plush and bronze, with photograph of furniture, Louis XV. style.

No. 2840—Collection of carved mouldings (15 samples).

RIVERA, Donato. Chillan.

No. 2841—Walnut stand, hand carved.

No. 2842—Walnut jewel box, hand carved.

No. 2843—Walnut shelves, hand carved.

GROUP 100—CARVINGS AND ART METAL WORK.

CLASS 399—Repousse, Hammered and Stamped Metal Ornaments.

GENAZZI, José. Santiago.

No. 2844—Brass dish, repousse.

GROUP 101—CERAMICS AND ALLIED PRODUCTS.

CLASS 403—Pottery.

KLEMM, José. Los Sauces. Glazed earthenware products:

No. 2845—Collection of plates.
No. 2846—Collection of dishes.
No. 2847—Collection of plates.
No. 2848—Collection of cups.
No. 2849—Collection of jars.
No. 2850—Various pieces table ware.

WIKER & PAGUEGUY. Chillan.

No. 2851—Collection of ornamental pottery.

COMMISSION OF CHILE. Santiago.

No. 2852—Collection of pottery..
No. 2853—Collection of common pottery.

COMPAÑIA EXPLOTADORA DE LOTA Y CORONEL. Valparaiso.

Fire-clay products. (See Class 212.)

GROUP 102—GLASS AND GLASS WARE.

CLASS 405—Plate, Window, Insulating, Engraved, Etched.

COMPAÑIA EXPLOTADORA DE LOTA Y CORONEL. Valparaiso.

No. 2854—Insulators.
No. 2855—Jars for batteries.

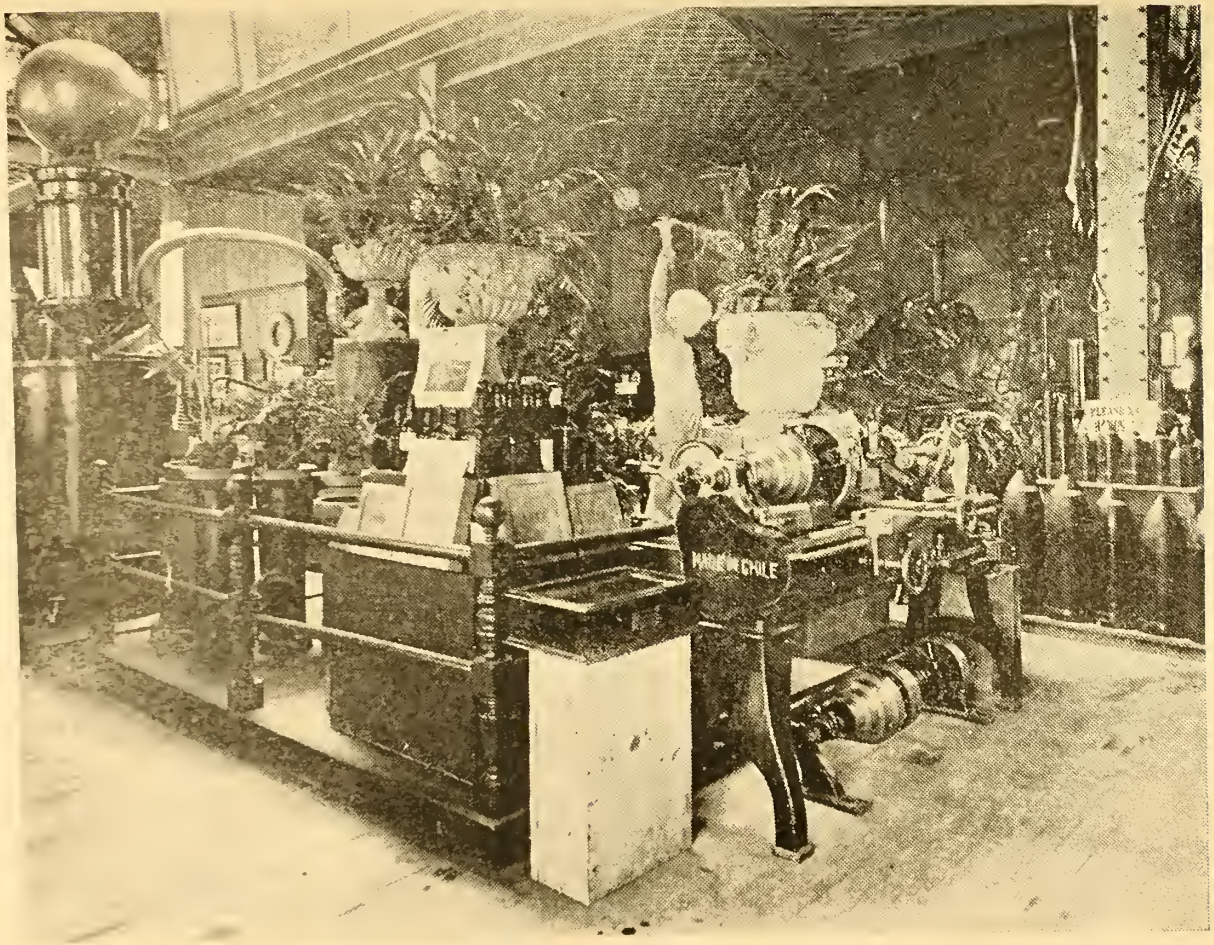
COMMISSION OF CHILE. Santiago.

No. 2856—Three plates stained glass (Vitraux). Made by Schlack & Co. of Santiago.

CLASS 406—Glass for Household Purposes, Fancy Articles.

COMPAÑIA EXPLOTADORA DE LOTA Y CORONEL. Valparaiso.

No. 2857—Beer bottles, quarts and pints.
No. 2858—Wine bottles, quarts and pints.
No. 2859—Beer bottles, "Corona" patent, large and small.
No. 2860—Soda water bottles.
No. 2861—Chimneys for mine lanterns.



MANUFACTURES EXHIBIT.

GROUP 105—LIGHTING APPARATUS AND APPLIANCES.

CLASS 417—Illuminating Gas Fixtures and Appurtenances.

COMMISSION OF CHILE. Santiago.

Made by José Genazzi:

No. 2862—Gas lamp in brass, hanging.
No. 2863—Two gas brackets in brass.

GROUP 110—RUBBER AND WATER-PROOF GOODS.

CLASS 439—Rubber Clothing, Covers and Protectors.

YUKOVIZKI, Leon. Fábrica de Impermeables. Santiago.

No. 2864—Water-proof overcoat, "Victoria."
No. 2865—Water-proof overcoat, "Czarine."
No. 2866—Water-proof coat.
No. 2867—Water-proof ulster.
No. 2868—Water-proof overcoat.
No. 2869—Water-proof Macfarlan.
No. 2870—Water-proof leggins.

GROUP 111—WOOLENS, COTTONS, LINENS, FURS AND MILLINERY, TOYS AND BARBERS' SUPPLIES.

CLASS 441—Woven and Felted Goods of Wool and Mixtures.

COMMISSION OF CHILE. Santiago. Products of the factory "Sociedad de Tejidos," of Santiago.

No. 2871—Samples of cheviot.
No. 2872—Samples of flannels.
No. 2873—Samples of cloths.
No. 2874—Woolen shawls, various colors.
No. 2875—Woolen "Poncho."
No. 2876—Woolen blanket.

COMMISSION OF CHILE. Santiago. Wool, hand woven, from Chillan.

No. 2877—Woven saddle-bags.
No. 2878—"Ponchos," common class.
No. 2879—"Ponchos," fine class.
No. 2880—Blankets.
No. 2881—Shawls.
No. 2882—Scarf.

COMMISSION OF CHILE. Santiago. Wool, hand woven, from Valdivia de Paine, O'Higgins Province.

No. 2883—Fine shawls.
No. 2884—Fine "Poncho."

BOZZO & FAZZINI. Fábrica de Paños de Bellavista. Tomé.

No. 2885—Samples of flannels.
No. 2886—Samples of cheviots.
No. 2887—Samples of cloths.
No. 2888—Samples of common cloths.
No. 2889—Black shawl.

CLASS 444—Silk and Fabrics of Silk.

SILVA é Hijos, Alejandro. Santiago.

No. 2890—Raw silk in skeins and spools.
No. 2891—Spool silk.
No. 2892—Curtain tassels.
No. 2893—Fringes.
No. 2894—Fringes for furniture.
No. 2895—Cord.
No. 2896—Braid.
No. 2897—Military and civilian scarfs.
No. 2898—Man's shawl.
No. 2899—Neckerchief.
No. 2900—Singlets.
No. 2901—Socks.
No. 2902—Sample of furniture upholstery.
(See Class 7.)

CLASS 446—Furs and Fur Clothing.

COMMISSION OF CHILE. Santiago.

No. 2903—Huillin skins, short and long hair.
No. 2904—Three huillin skins.
No. 2905—Two huemul skins.
No. 2906—Six chinchilla skins.
No. 2907—Five fox skins.

PUGA BORNE, Dr. Federico. Santiago.

No. 2908—Puma skin (Chile lion).
No. 2909—Four huillin skins.
No. 2910—Huemul skins.
No. 2911—Ostrich rug.

LASO, J. Tadeo—Santiago.

No. 2912—Puma skin (Chile lion).
No. 2913—Mountain cat skins.
No. 2914—Huillin skins.
No. 2915—Dog skin.
No. 2916—Fox skins.

COMMISSION OF CHILE. Santiago.

No. 2917—Blouse of embroidered leather.
No. 2918—Vest of embroidered leather.
No. 2919—Trousers of embroidered leather.

CLASS 447—Clothing and Costumes for Men, Women and Children.

BAÑADOS & CO., J. Santiago.

No. 2920—Corsets, six styles.
No. 2921—Bands, three styles.
No. 2922—Back corset.
No. 2923—Belt.

CLASS 448—Knit Goods, Underwear and Hosiery.

FABRICA DE TEJIDOS DE PUNTO "VICTORIA." Santiago.

No. 2924—Socks: raw, woolen, mixed and "antomalicos."
No. 2925—Stockings: raw, wool, mixed, Shetland, one color, and black tasseled.
No. 2926—Singlets: raw, mixed, wool, for men and women.

CLASS 450—Millinery, Laces, Embroidery, Feathers, Fans, etc.

COMMISSION OF CHILE. Santiago.

No. 2927—Ostrich feather dusters.
No. 2928—Collection of hand-made linen laces, from Chillan.
No. 2929—Collection of hand-made embroidery, from Chillan.
No. 2930—Cushion for making laces.

PICARDO, Hermanos. Santiago.

No. 2931—Six ostrich feather dusters.

GROUP 112—PAPER, STATIONERY AND TYPEWRITERS.

CLASS 452—Paper in Various Forms, in Manufactured Articles.

FABRICA DE PAPEL. Quillota.

No. 2932—Wrapping paper.
No. 2933—Wrapping paper in rolls.

AVARIA, Romulo. Talca.

No. 2934—Wrapping paper.

CLASS 453—Wall Paper, Roofing Paper, etc.

AVARIA, Romulo. Talca.

No. 2935—Paper for lining or backing.

BASCUÑAN, S. M. Ascanio, Ocoa.

No. 2936—Floor paper.

CLASS 454—Stationers' Goods, Implements for Household Goods.

BRAVO, Gregorio. Valparaiso.

No. 2937—Indelible ink.
No. 2938—Indelible copying ink.

PICARDO & CO., E. Santiago.

No. 2939—Copying ink, blue-black.
No. 2940—Writing ink, vegetable-agallica.
No. 2941—Indelible ink.
No. 2942—Scarlet ink.

LABORATORIO ESCUDO DE CHILE. E. Villarroel, proprietor. Santiago.

No. 2943—Indelible ink.

STRIKLER & KUPFER, Hermanos. Santiago.

No. 2944—Copying press.

PIERRET, Miguel. Santiago.

No. 2945—Black-board erasers.

GROUP 113.

LEATHER AND MANUFACTURES OF LEATHER.

CLASS 456—Tanned and Curried Leather.

RUDLOFF Hijos, Christian. Valdivia.

No. 2946—Calf skins.
No. 2947—Leather bindings.

CLASS 457—Sole Leather and Articles made therefrom.

RUDLOFF Hijos, Christian. Valdivia.

No. 2948—Sole leather for shoemakers.
No. 2949—Sole leather for saddlery.

KUNNSTMAN, J. & C. Valdivia.

No. 2950—Sole leathers.

HOFFMANN & FUCHSLOCHER. Valdivia.

No. 2951—Sole leather.

COMMISSION OF CHILE. Santiago. (E. & J. Gibbs, Valparaiso.)

No. 2952—Machine-made shoes for men, women and children.

RIOS, Doctor Conrado. Santiago.

No. 2953—Hygienic military shoes (3 samples).

PETRI, Alejandro. Valparaiso.

No. 2954—Boots and shoes, patent and Russian leather.
No. 2955—Slippers, ladies', satin and silk, embroidered.

ARTOLOZAGA & CO., Gavino. Santiago.

No. 2956—Boots and shoes, patent leather and kid.
No. 2957—Slippers, patent leather and kid.

COUDEU & CAMALEZ. Santiago.

No. 2958—Leggings, embroidered leather.
No. 2959—Leggings, embroidered patent leather.

CLASS 460—Leather Belting, Hose, etc.

PLUMP, Jerman. San Felipe.

No. 2960—Samples of leather belting.

Not Classified.

FEDERICO SCHREBLER. Santiago.

No. 2961—Sculptures in leather.

GROUP 115—STEEL AND WROUGHT IRON.

CLASS 466—Wrought Iron Articles of All Kinds not Specifically Classified.

COMPAÑIA GALVANIZADORA DE FIERRO. Valparaiso.

No. 2962—Galvanized iron plates.

DAVISON, Guillermo. Chillan.

No. 2963—Cut nails.

Class 467—Horseshoes and Crude Forgings.

ESTADO MAYOR GENERAL DEL EJÉRCITO (General Staff of the Army). Santiago.

No. 2964—Samples of horseshoes used in the army.

GROUP 116—VAULTS, SAFES, HARDWARE, CUTLERY, EDGE TOOLS, AND OTHER IMPLEMENTS.

CLASS 468—Vaults, Safes and Equipments.

STYLES & CO. Santiago.

No. 2965—Fire-proof safe.
No. 2966—Model of vault for banks.
No. 2967—"Bash" lock, with combination and key.
No. 2968—"Bash" lock, with key.

GROUP 117—MISCELLANEOUS.

Not Classifed.

FUENZALIDA, Carlos. La Serena.

No. 2969—Artificial coal.

JERIA, Arnaldo. Santiago.

No. 2970—Artificial emery powder (3 classes).

AVARIA, Romulo. Talca.

No. 2971—Brooms, with 5, 4 and 3 ties (6 samples).
No. 2973—Whisk brooms.

COMMISSION OF CHILE. Santiago.

No. 2974—Collection of "Boqui" fibre baskets.

WIKER & PAGUEGUY. Chillan.

No. 2975—Collection of fibre and horse-hair toy baskets.

BRAVO, Gregorio. Valparaiso.

No. 2976—Liquid shoe dressing for kid.
No. 2977—Liquid shoe dressing for patent leather.
No. 2978—Liquid shoe dressing for tan leather.

TELLO, A. Santiago.

No. 2979—Shoe dressing.

ZANGOLLI, J. B. La Serena.

No. 2980—Straw hats, sample collection.

RODRIGUEZ, J. A. Valparaiso.

No. 2981—Cigarettes.
No. 2982—Ten classes of cigars.
No. 2983—Prepared corn husks, for cigarette wrappers.
No. 2984—Five samples of chopped tobacco.

COMPAÑIA SUD-AMERICANA DE TABACOS. Valparaiso.

No. 2985—Cigarettes.

HROMADA & CO. Valparaiso.

No. 2986—Life preservers of cork.
No. 2987—Cork plate showing different stages of process in working.
No. 2988—Samples of cork stoppers for druggists.
No. 2989—Samples of cork stoppers for wine dealers.
No. 2990—Four specimens of ground cork.
No. 2991—Five specimens of cork paper.

REICH, Federico. Santiago.

No. 2992—Samples of hemp, linen and wire rope.

CABALLERO, Emiliano. Graneros.

No. 2993—Samples of cables and ropes.

PARRY & CO. San Felipe.

No. 2994—Samples of ropes and twines.

OPAZO & CO. Santiago.

No. 2995—Wax candles, sample line.

No. 2996—Stearine candles, "Santiago," sample line.

HORMANN & CO. Valparaiso.

No. 2997—Stearine candles, "Brouxelles," sample line.

COUSIÑO, LYON & CO. Valparaiso.

No. 2998—Stearine candles, "Princess," sample line.

LITERATURE.

COMMISSION OF CHILE. Santiago.

No. 2999—Descripcion de la Fabrica Nacional de Impermeables (Description of the Water-proof cloth factory).

No. 3000—Esposicion sobre la Fabrica de Tejidos de Talca. Anjel C. Arcos y Compañía. Estatutos de la Compañía manufacturera de Telas, Santiago (Information and rules of the wool-weaving factory at Talca and Santiago).

No. 3001—Industrias Santiaguinas, by Mariano Martinez, 1896 (Industries of Santiago).

SOCIEDAD DE FOMENTO FABRIL (Society for the Promotion of Industries). Santiago.

No. 3002—Boletin de la Sociedad (Bulletin of the Society), 1884 á 1900, 17 volumes.

(See Class 513, Industries and Commerce.)

DIVISION XIV.

GRAPHIC ARTS.

GROUP 120—RESULTS IN PRINTING, ENGRAVING AND BOOK-BINDING.

CLASS 496—Specmiens Illustrating Type and Typography.

IMPRENTA, LITOGRAFÍA Y ENCUADERNACIÓN BARCELONA. Santiago.

No. 3004—Specimens of typography.

IMPRENTA Y LITOGRAFÍA H. C. GILLET. Valparaiso.

No. 3005—Specimens of typography.

COMMISSION OF CHILE. Santiago.

No. 3006—Specimens of typography of the following printing houses:

Imprenta Cervantes. Santiago.
Imprenta Sud-Americana. Valparaiso.
Imprenta Elzeviriana. Santiago.
Imprenta Gutemberg. Santiago.
Imprenta Federico T. Lathrop. Santiago.
Imprenta de la Patria. Valparaiso.
Imprenta del Universo. Valparaiso.
Imprenta Moderna. Santiago.

CLASS 497—Specimens of Lithographing and Kindred Processes.

IMPRENTA, LITOGRAFÍA Y ENCUADERNACIÓN BARCELONA. Santiago.

No. 3007—Specimens of lithography.

IMPRENTA Y LITOGRAFÍA H. C. GILLET. Valparaiso.

No. 3008—Specimens of lithography.

COMMISSION OF CHILE. Santiago.

No. 3009—Specimens of lithography (work of the Litografía P. Cadot, Santiago).

CLASS 498—Specimens of Photo-Engraving.

IMPRENTA, LITOGRAFÍA Y ENCUADERNACIÓN BARCELONA. Santiago.

No. 3010—Photo-engraving specimens.

IMPRENTA Y LITOGRAFÍA H. C. GILLET. Valparaiso.

No. 3011—Photo-engraving specimens.

COMMISSION OF CHILE. Santiago.

No. 3012—Photo-engraving specimens (work by F. Leblanc, Santiago).

CLASS 501—Specimens of Book-Binding.

IMPRENTA, LITOGRAFÍA Y ENCUADERNACIÓN BARCELONA. Santiago.

No. 3013—Specimens of book-binding.

COMMISSION OF CHILE. Santiago.

No. 3014—Specimens of book-binding (work by Federico Schrebler, Santiago).

GROUP 121—HISTORY AND LITERATURE.

CLASS 505—History and Literature of the Graphic Arts.

MEDINA, José Toribio. Santiago.

No. 3015—"Bibliografía de la Imprenta en Santiago de Chile, desde sus orígenes hasta 1817" (Bibliography of the printing art in Santiago of Chile, from its origin up to 1817), 1891.

No. 3016—"La Imprenta en Manila, desde sus orígenes hasta 1810" (The printing art in Manila, Phillipine Islands, from its origin up to 1810), 1894.

No. 3017—"Biblioteca Hispano-Chilena, 1523 á 1817" (Catalogue of books published either by Chileans or Spaniards, residents in Chile, from 1523 to 1817), three volumes, 1897.

No. 3018—"Mapoteca Chilena, ó sea índice cronológico de los mapas, planos y vistas referentes á Chile; con una reseña histórica sobre la geografía y cartografía del País" (Chronological catalogue of the maps, plans and views referring to Chile, and historical sketches on geography and cartography of that country), 1899.

O'RYAN, Juan Enrique. Santiago.

No. 3019—"Bibliografía de la Imprenta en Guatemala en los siglos XVII y XVIII" (Bibliography of printed works in Guatemala during the XVII and XVIII centuries), 1897.

MORENO, Gabriel René. Santiago.

No. 3020—"Supplemento á la Biblioteca Boliviana" (Supplementary catalogue of the books and pamphlets published in Bolivia), 1879 to 1899.

No. 3021—"Anuario de la Prensa Chilena, publicado por la Biblioteca Nacional" (Annual catalogue of the books, pamphlets and newspapers printed in Chile, published by the National Library), 1886 to 1896; nine volumes.

DIVISION XV.

LIBERAL ARTS.

Education, Engineering, Public Works, Sanitation, Constructive Architecture, Social Economy, Music and the Drama.

GROUP 122—EDUCATION.

CLASS 506—Elementary and Primary Instruction.

COMMISSION OF CHILE. Santiago.

No. 3022—"Educación é Instrucción" (Education and Instruction), by Octavio Greard, translated into Spanish, 1889.

No. 3023—"Noticias Históricas sobre las Escuelas Públicas de Chile á fines de la Era Colonial" (Historic Notes on the Public Schools of Chile at the close of the Colonial Era), by Manuel José Frontaura, 1892.

No. 3024—"Prontuario de Legislación Escolar" (Summary of School Legislation), by Manuel Antonio Ponce, 1890.

No. 3025—"Guia del Preceptor Primario y del Visitador de Escuelas" (Guide Book for Primary Teachers and School Inspectors), by José Bernardo Suarez, 1896.

No. 3026—"Informe del Inspector General de Instrucción Primaria" (Report of the Inspector General of Primary Instruction), 1865.

No. 3027—"Exposición Nacional de 1888—Memorias sobre Instrucción Primaria" (National Exposition of 1888—Reports on Primary Instruction), 1889.

No. 3028—"Ministerio de Guerra—Reglamento para las Escuelas Primarias del Ejército" (War Department—Rules and Regulations for the Primary Schools in the Army), 1895.

No. 3029—"Exposición sobre el Silabario para la enseñanza de la lectura y la escritura simultánea, preparado de acuerdo con el método oral" (Explanation on the reader for the teaching of writing and reading together, prepared according to the verbal method), by Manuel A. Ponce, 1899.

No. 3030—"El libro del Niño" (The Child's Book—first lessons on the art of reading and writing), by Eduardo de la Barra, 1897.

No. 3031—"Libro de Lectura" (Reader), by Martín Schneider, 1901.

No. 3032—"El Lector Americano" (The American Reader, gradual course of reading, three books), by J. Abelardo Nuñez.

No. 3033—"Nuevo libro de lectura" (New Reader, logical continuation of the First Reader), by Francisco T. Morales Olave, 1900.

No. 3034—"Lector Educativo é Instructivo" (Educational and Instructive Reader), by Victoriano de Castro G., 1901.

No. 3035—"Nuevo método para la enseñanza simultánea de la Lectura y Escritura" (New method for the teaching of reading and writing), by Claudio Matte, 1895.

No. 3036—"El Lector Americano" (The American Reader), primary book for the teaching of reading and writing together, by Manuel A. Ponce, 1901.

No. 3037—"El Lector Chileno" (The Chilean Reader, second book); arranged according to the progressive method for the third year, by Juan Turke and J. Ortiz, 1898.

No. 3038—"Vida de Nuestro Señor Jesucristo" (Life of our Lord Jesus Christ, with a brief account of Palestine), translated into Spanish by F. Domingo Sarmiento, 1879.

No. 3039—"Chilcatun Chile dugme" (First reader of the Araucanian language), 1899.

No. 3040—"Poesias Escolares" (Scholarship poetry), by Domingo Villalobo B., 1898.

No. 3041—"Poesias para los Niños" (Poetry for Children, collection of verses arranged for songs), 1901.

No. 3042—"Cantos Populares" (Popular songs), collected and arranged by José Tadeo Sepúlveda, 1890.

No. 3043—"Vida y Viajes de Cristobal Colon," by Washington Irving (Life and Voyages of Christopher Columbus), translated into Spanish, 1893.

No. 3044—"Elementos de la lengua Castellana" (Elements of the Spanish language), arranged according to the Swinton method by Fanor Velasco, 1895.

No. 3045—"Manual de Gimnasia Escolar" (Hand-book on School Gymnastics).

No. 3046—"Aritmética y Sistema Métrico" (Arithmetic and Metric System), by H. Fernandez, 1883.

No. 3047—"Sistema Métrico Decimal" (Treatise on the Decimal Metric System), arranged by R. M. U., 1898.

No. 3048—"Catecismo de la Doctrina Cristiana" (Catechism of the Roman Catholic Doctrines), by Frai José Benitez, 1900.

No. 3049—"Curso de Historia Sagrada" (Course of Sacred History), by the Rev. Francisco de Paula Taforó, 1901.

No. 3050—"Tratado Elemental de Historia de Chile" (Elementary Treatise on the History of Chile), arranged by Domingo Villalobos, 1898.

No. 3051—"Historia de Chile" (History of Chile), by Francisco Valdes Vergara, 1898.

No. 3052—"Lecciones de Historia Universal" (Lessons on Universal History), for school use, 1889.

No. 3053—"El Porqué? ó la Física" (Why? or Physics), by M. Levy Alvarez, translated by Domingo F. Sarmiento, 1883.

CLASS 507—Secondary Instruction.

COMMISSION OF CHILE. Santiago.

No. 3054—"Principios de Lójica" (Principles of Logic) according to the English Experimental School, by Alfredo Escuti Orrego, 1895.

No. 3055—"Tratado Elemental de Versificación Castellana" (Elements of Spanish Versification), by Enrique Nercasseaux y Morán.

No. 3056—"Geografía Antígua Comparada" (Ancient Geography for the study of History), by Javier Villar, 1892.

No. 3057—"Curso de Historia General" (Course of General History), by Luis Barros Borgoño, 1894.

No. 3058—"Nociones de Geografía anexas al curso de Historia Moderna y Contemporánea" (Elements of Geography for the Study of Modern History), 1897.

No. 3059—"Compendio de Historia de Chile" (Elemental course on the History of Chile), by Daniel Riquelme, 1899.

No. 3060—"Historia de Roma Antigua" (History of Ancient Rome), by Julio Mentebruno, 1899.

No. 3061—"Nociones de Algebra Elemental" (Elements of Algebra), by Abel Izquierdo, 1900.

No. 3062—"Elementos de Matemáticas" (Elements of Mathematics), by Dr. Augusto Talfemacher and Dr. Ricardo Poenisch, 1896.

No. 3063—"Curso Progresivo de Gramática y Composición Literaria" (Advanced course of Grammar and Literary Composition), by José M. Muñoz Hermosilla.

No. 3064—"Gramàtica Elemental de la Lengua Francesa" (Elementary Grammar of the French language), by Rodolfo Senz and Antonio Diez, 1901.

No. 3065—"Elementos de Filosofía" (Philosophical Elements), by Rev. Francisco Ginebra, 2 volumes, 1889.

No. 3066—"Nociones de Cosmografía" (Elements of Cosmography), by Ruben Guevara, 1897.

No. 3067—"Aritmética Práctica" (Practical Arithmetic), by V. de Castro G., 1895.

No. 3068—"Tratado Elemental de Geografía é Historia (Elementary course of Geography and History), by Domingo Villalobos, 1899.

No. 3069—"Lecciones de Historia de Chile" (Lessons on the History of Chile), by Domingo Villalobos B., 1896.

No. 3070—"Resumen de la Historia de la Astronomía" (History of Astronomy), 1890.

No. 3071—"Teoría y Práctica de la enseñanza del Castellano" (Theory and Practice of Teaching Spanish), by Isabel Bering and José T. Sepúlveda, 1896.

No. 3072—"Liceo Isabel Le-Brun de Pinochet" (High School "Isabel Le-Brun de Pinochet"), 1901.

No. 3073—"Liceo Miguel Luis Amunátegui" (High School "Miguel Luis Amunátegui"), 1900.

No. 3074—"La Instrucción secundaria y la Instrucción Universitaria en Berlin" (Secondary and University Instruction in Berlin); Report of the Chilean Legation in Germany, 1885.

DIEGO BARROS ARANA. Santiago.

No. 3075—"Elementos de Literatura" (Elements of Literature), 2 volumes, 1898.

No. 3076—"Historia Literaria" (History of the Literature), 1893.

No. 3077—"Manual de composición Literaria" (Hand-book on Literary Composition), 1889.

No. 3078—"Elementos de Geografía Física" (Elements of Physical Geography), 1900.

CLASS 508—Superior Instruction.

COMMISSION OF CHILE. Santiago.

No. 3079—"Tratado de Administración Pública aplicado al Curso de Ingenieros" (Treatise on Public Administration as applied to the Course of Engineering), by H. Perez de Arce, 1896.

No. 3080—"Tratado de Cálculo Infinitesimal" (Treatise on Calculations), by A. Obrecht, 2 volumes, 1896.

No. 3081—"Tratado de Trigonometría Rectilínea" (Treatise on Rectilinear Trigonometry), by Benjamín Silva González, 1885.

No. 3082—Tratado de Mecánica Racional" (Treatise on Mechanics), by A. Obrecht, 1896.

No. 3083—"Tratado Teórico y Práctico de Astronomía Esférica (Theoretic and Practical Treatise on Spherical Astronomy), by Adolfo Fórmas, 1886.

No. 3084—"Explicaciones de la Ley de Organización y Atribuciones de Tribunales" (Explanations on the Law of Organization of Tribunals and power vested in them), by Matias Rios González, 1894.

No. 3085—"Ley de Organización y Atribuciones de los Tribunales" (Law for the Organization of Tribunals and the power vested in them), by Carlos Risopatron.

No. 3086—"Compendio de Derecho Internacional Público" (Treatise on Public International Laws), by Eduardo Phillips, 1897.

No. 3087—"Nociones de Derecho Internacional" (Treatise on International Laws), by Miguel Cruchaga, 1879.

ROBUSTIANO VERA. Santiago.

No. 3088—"Práctica Forense ó Prontuario de Procedimientos Judiciales" (Guide for Judicial Proceedings), by Robustiano Vera, 2 volumes, 1887.

SCHOOL WORK EXHIBIT.

CLASS 510—Agricultural Instruction.

COMMISSION OF CHILE. Santiago.

No. 3089—"Curso Elementalde Agricultura" (Elementary Course of Agriculture), translated from the English, by Francisco Solano Astaburuaga, 1886.

No. 3090—"Reglamento para la Escuela Práctica de Agricultura de Chillan" (Rules and Regulations for the Practical Agricultural School of Chillan), 1899.

No. 3091—"Reglamento General de la Escuela Práctica de Agricultura de Santiago, 1894 (General Rules and Regulations for the Practical School of Agriculture of Santiago).

(See Classes 12, 42, 84 and 159.)

CLASS 511—Industrial and Commercial Education.

ESCUELA PROFESIONAL DE NIÑAS DE SANTIAGO (Professional School for Girls). Santiago.

No. 3092—Millinery goods: Black mourning bonnet of crépe; chiffon for baby, white; baby's hat, Louis XV style; baby's hat of straw and chiffon; baby's hat of liberty silk; hoods for babies, with colored ribbons; riding habit and cap; white gauze gown; white tucked mousseline waist; violet and white foulard silk waist; gray dress for child, with blue braid trimmings; green dress for child, trimmed with white braid; tan cloth dress for child; blue sailor suit for child.

No. 3093—Knit woolen goods: Baby socks; Scotch jersey; blue jerseys, with stripes; blue waistcoat for gentleman; brown waists for lady; red night gown; cream jacket for baby; blue jacket, with brass buttons, for baby; cream jacket, with hood, for baby; red dress with hood; rose pink imperial dress; slate color blouse; white shawl; sky-blue vest, for baby; cream vest, for baby; large sky-blue vest; two pairs brown leggins; pair long grey leggins; pair blue leggins; pair light-brown socks; pair black cotton socks; electric blue vest; drab-color shirt; pair cotton drawers; pair woolen drawers.

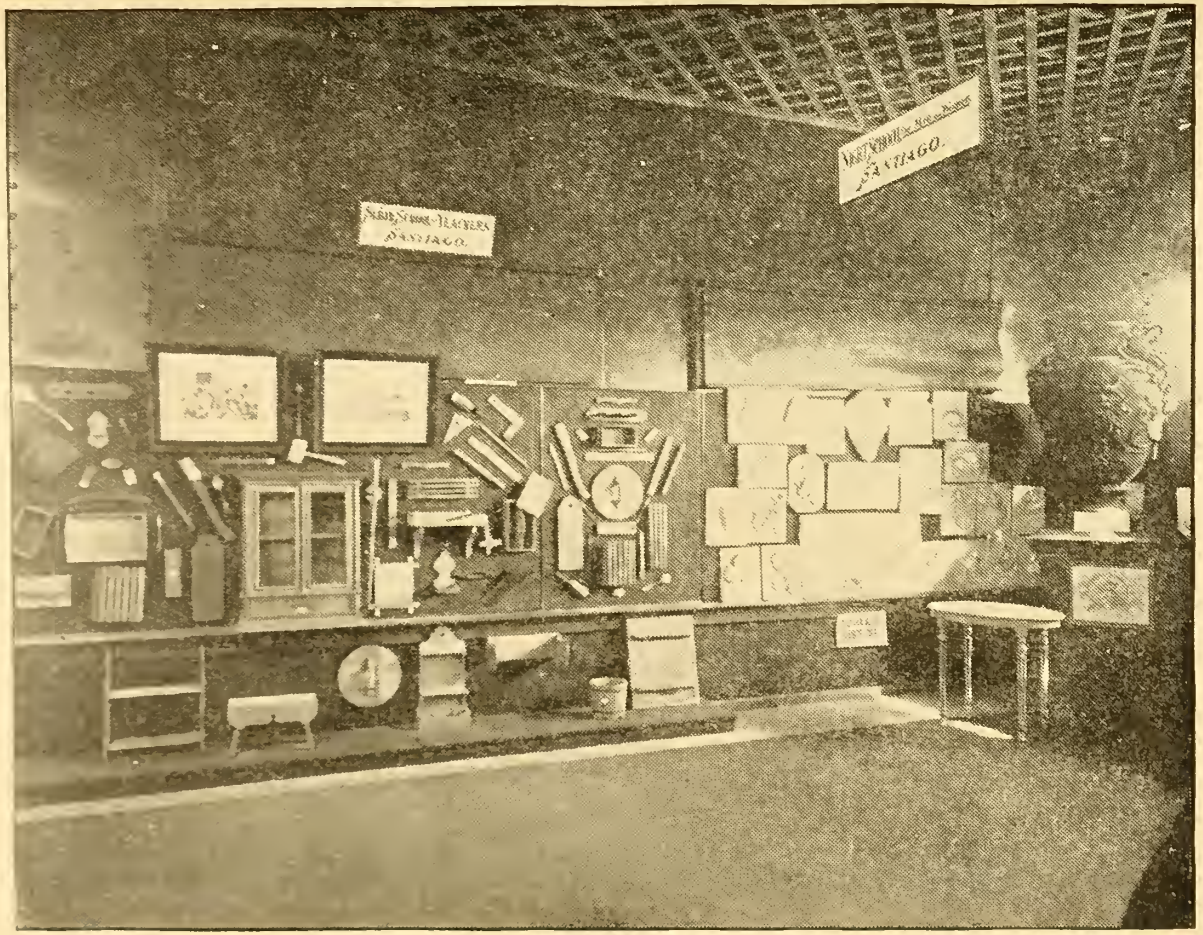
No. 3094—Linen goods: Apron with red embroidery; apron with blue embroidery; apron with blue embroidery and drawn work; apron with red embroidery and drawn work; washstand service with red embroidery; baby bibs; embroidered chemise; embroidered shirt; shirt with collar and cuffs; chemises; night-gown; ruffled shirts; short shirts; drawers with lace, for ladies; drawers with stitching, for men; collar and pair of cuffs; shirt bosom with pink tie; blue dickey for ladies, with collar and cuffs; undershirt; collection of monograms; samples of embroidered border on canvas.

No. 3095—Fancy work: Four cushion covers (two plush, one satin and one lace work); pillow (tan color, with silk embroidered flowers); pillow (red satin, with red and gold applique); pillow, with Arabian embroidered design; pillow of Smyrne; newspaper pocket of canvas and green plush; newspaper pocket of canvas and plush applications; head-rest, Arabian design; plush wall-pocket (crushed strawberry color); screen with Chinese embroidery; canvas table cover; cream table cover; handkerchief cases (one cream satin and the other rose); handkerchief case (Oriental gold lace work); table cloths (Hundanger); screens on painted silk and embroidery; screen (Louis XV design); cover for chalice; piece of embroidery on sky-blue satin; fan, painted on cream silk; rose mat of embroidered net-work; large table scarf (blue embroidery); table cover (blue embroidery); two towels, with red and blue embroidery; cover for stand; embroidered napkin; embroidered shirt cases.

No. 3096—Various: Exhibit of Richelieu lace; lace handkerchief; sprays of artificial flowers; corsets of different colors and numbers; girdles of canvas; back with red ribbons; blue waist for baby; bridal outfit; ornamented busts; small painted box; oil paintings of flowers and fire-engraved wood frames.

ESCUELA PROFESIONAL PARA NIÑAS (Professional School for Girls). Valparaiso.

No. 3097—Fancy work and various: Pillow (crushed strawberry satin), embroidered; white satin pillow with applications; pillow cover of rose satin, embroidered; Arabian puff, embroidered; embroidered Chinese silk scarf; embroidered pin-cushion of cream and rose silk; cover for fancy work table (light gray); coverlet with stitched embroidery; coverlet embroidered on stitched canvas; coverlet embroidered on stitched in gold; coverlet embroidered on cloth; table cover with red worsted embroidery; long table scarf embroidery "Mauricio"; long table scarf, embroidery on canvas; long table scarf with stitched embroidery; long table scarf with silk flowers; handkerchief case with Spanish lace; handkerchief case embroidered in silk and gold; wall-pocket (blue plush and satin, painted); table cover (plush and silk); tray cloth (point lace); tray cloth, with Chinese embroidery; small tray cloth, with drawn work, hand embroidery; several small tray cloths with drawn work; lace handkerchiefs; towel lace embroidery; net-work bed-spread, embroidered; table mat of electric blue plush and gold net-work; table mat of pearl silk and gold net-work; table mat, embroidered with thread; table spreads, brown silk embroidered; table spreads of canvas with red embroidery.



SCHOOL WORK EXHIBIT.

ESCUELA DE TRABAJOS MANUALES PARA PROFESORES (Slöjd School for Teachers). Santiago.

No. 3098—Wood work in the Normal Course and the Primary Schools: Pencil; match-case (prismatic); key-tag; knitting frame; round rule; towel-rack; paper cutters; razor-strop; tray; hammer-handle; spoon; meat-board; roller-pin; scoop; coat-rack; flower vase stand; mallet; wringer; book-press; box; ladle; flat rule; frame; hanging bracket; boot-jack; cabinet; book-shelf; axe-handle; knife tray; American axe-handle; bracket; pointer; triangle; pencil box; bench; square; drawing-board; gauge; soap-dish; match-case; coat-rack; knife tray; small bucket; stand; night table; darner; coat hanger.

ESCUELA NOCTURNA DE DIBUJO INDUSTRIAL PARA OBREROS, DE LA SOCIEDAD DE FOMENTO FABRIL (Night School of Industrial Drawing). Santiago.

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ESCUELA DE ARTES Y OFICIOS (School of Arts and Trades). Santiago.

No. 3106—Lithographic press; steam boiler dome; copying press; brass pails; steel eccentric for locomobiles; press screw, two inches in diameter; iron handle for hand-motor; steel handles; models in wood of presses, screws and cones; bronze plaques, in relief; photographic views; colored drawings of machinery and ornamentation.

LITERATURE.

No. 3108—The Slöjd Teaching in Chile, by Joaquín Cabezas, 1901.

No. 3109—"Programa de los Ramos que se estudian en la Escuela de Minería de Santiago" (Program of the different courses of study in the Mining School of Santiago), 1879.

No. 3110—"Reglamento para la Escuela Practica de Minería de Santiago" (Rules and Regulations of the Practical School of Mines of Santiago), 1895.

No. 3111—"Reglamento General para la Escuela Profesional de Niñas de Santiago" (General Rules and Regulations of the Professional School for Girls of Santiago), 1901.

No. 3112—"Reglamento General para la Escuela de Artes y Oficios de Mujeres" (General Rules and Regulations of the School of Arts and Trades for Women), 1888.

No. 3113—"Reglamento para el Laboratorio de Ensayes metalúrgicos anexos á la Escuela Practica de Minería" (Rules and Regulations of the Laboratory of Metallurgical Experiments annexed to the Practical School of Mines), 1898.

Not Classified.

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No. 3114—"Nociones de la Historia de la Pedagogía" (Notes on the History of Pedagogy), by Manuel Antonio Ponce, 1889.

No. 3115—"Sarmiento y sus doctrinas pedagógicas" (Señor Sarmiento and his pedagogical doctrines), by Manuel Antonio Ponce, 1890.

No. 3116—"Pedagogía Elemental" (Elemental Pedagogy), by Emilio Lopré, 1882.

No. 3117—"La Instrucción Primaria en Chile y la Pedagogía Moderna" (Primary Instruction in Chile and Modern Pedagogy), by Ricardo Briones, 1888.

No. 3118—"Manual de Pedagogía y de Método General, ó Guia del Institutor primario" (Hand-book on Pedagogy and General Tuition Methods), by B. Overberg, translated from French, 1861.

No. 3119—"Teoría y Práctica del arte de enseñar, ó Método para dirigir bien una Escuela" (Theories and Practices in the art of teaching, and how to conduct a school properly), by David T. Page, translated by M. S. F., 1872.

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OFICINA CENTRAL DE ESTADÍSTICA (Central Bureau of Statistics). Santiago.

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BESOAIN, José Miguel. Santiago.

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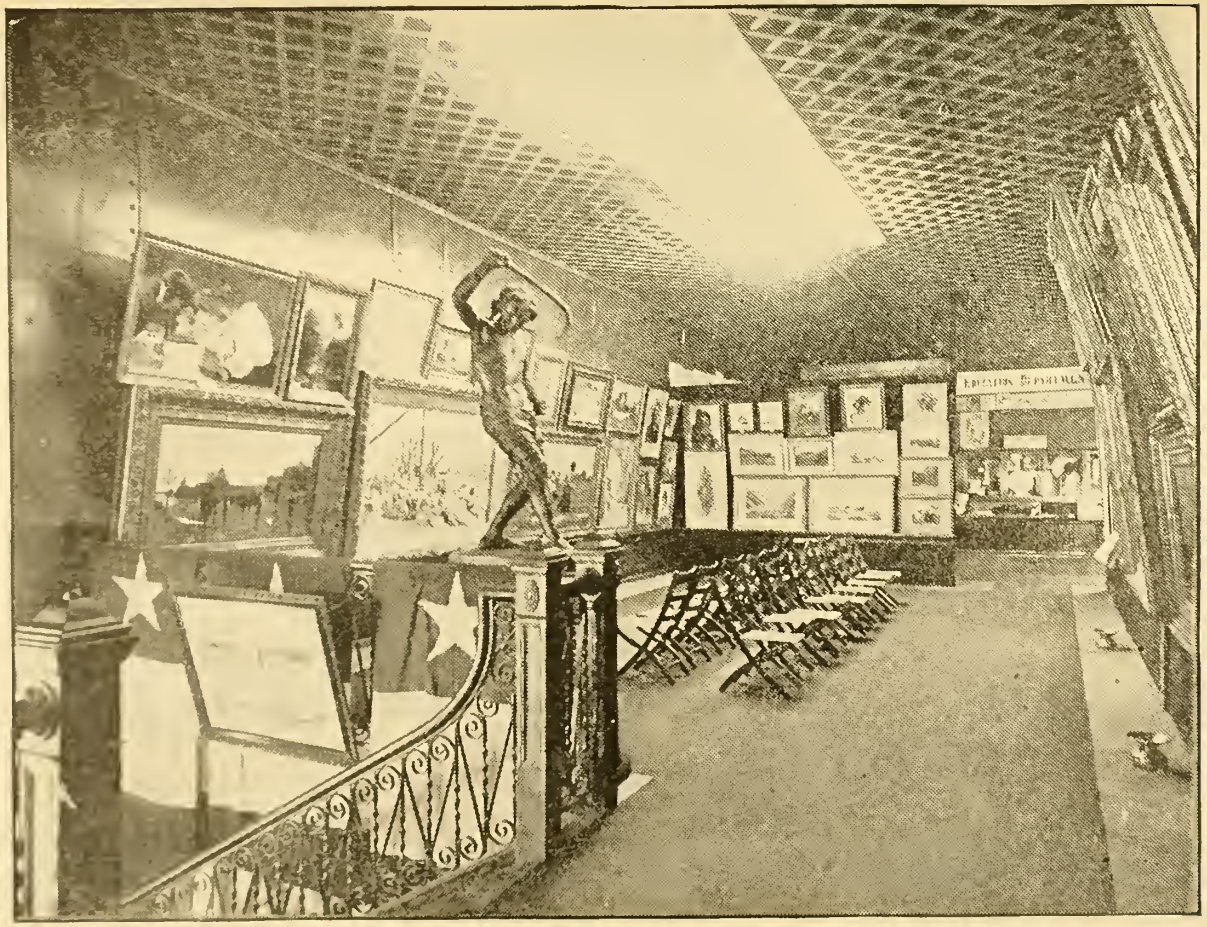

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JARPA, Onofre. Santiago.—Pupil of Bertuni and Pradilla, in Rome. Expositions at Santiago: second-class medal in 1875; first-class medal, 1877. Annual Exhibition at Santiago: first-class medal, 1888, and Prize of Honor in 1893; Edwards Prize in 1888 and 1893; Maturana Prize in 1888 and 1893.

No. 63—"Mountain scene." (*)
No. 64—"Palm trees at the Chillan Baths." (*)
No. 65—"Landscape of the Manzano Hills. (*)
No. 66—"An evening landscape."

JOFRE, Pedro. Santiago.—Pupil of Pedro Lira. Annual Exhibitions at Santiago: second-class medal in 1894; first-class medal in 1897; Maturana Prize, *ex-aequo*, 1897.

No. 67—"The potato harvest." (*)
No. 68—"A kitchen." (*)

LAROCHE, Fernando. Santiago.—Student in the School of Fine Arts of Paris. Annual Exhibitions at Santiago: second-class medal in 1890; first-class medal in 1897.

No. 69—"Spring." (*)
No. 70—"Hill landscape." (*)
No. 71—"A portrait." (*)

LYNCH, Enrique. Santiago.—Studied in Europe. Annual Exhibition at Santiago: second-class medal in 1891.

No. 72—"For a walk."
No. 73—"Sun rays.
No. 74—"Fruits."

LIRA, Pedro. Santiago.—Pupil of Luminais and Delaunay in Paris. Exposition at Santiago: second-class medal in 1872; first-class medal, 1875: three first-class medals and a special diploma of honor in 1884; first-class medal, 1888; Salon of Paris, Honorable Mention, 1882; Maturana Prize in 1884; Edwards Prize in 1893 and 1895; and Prizes of Honor in 1888 and 1898. Paris Universal Exposition: second-class medal, 1889, and a bronze medal in 1900.

No. 75—"Portrait of L. Davila Larrain."
No. 76—"Philip II. and the Great Inquisitor." (*)
No. 77—"Quarrying." (*)

LASTARRIA, Luisa (Señorita). Santiago.—Amateur pupil of Pedro Lira. Annual Exhibition at Santiago in 1893: third-class medal.

No. 78—"Fruits." (*)

MONVOISIN, Raymond Q. (deceased).—He lived in Santiago and had many pupils.

No. 79—"Bishop Elizondo," portrait. (*)

"AFTERNOON IN VENICE"—By Alberto Orrego Luco.

"QUARRYING"—By Pedro Lira.

"PHILIP II. AND THE GREAT INQUISITOR."
By Pedro Lira.

"CONFIDENCE"—By Ernesto Molina.

"MISTIFICATION"—By Pedro A. Reszka M.

"MOUNTAIN SCENE"—By Onofre Jarpa.

"SPRING"—By Alberto Valenzuela Llanos.

MIRA, Magdalena (Señorita). Pupil of Pedro Lira.—Expositions at Santiago: first-class medal in 1884. Annual Exhibition at Santiago: third-class medal in sculpture, 1891; Edwards Prize, 1891.

No. 80—"Portrait of G. M." (*)

MIRA, Aurora (Señorita). Santiago.—Pupil of Pedro Lira. Exposition at Santiago: second-class medal in 1884. Annual Exhibition at Santiago: first-class medal, 1896. Edwards Prize, Prize of Honor, 1895.

No. 81—"Roses."

MARTINEZ, Guillermo. Santiago.—Student in the School of Fine Arts. Annual Exhibition at Santiago: third-class medal, 1900.

No. 82—"Proudness."

MARIN, Florencio (deceased). Santiago.—Student in the School of Fine Arts. Annual Exhibition at Santiago: third-class medal, 1895.

No. 83—"Forenoon." (*)
No. 84—"Suburbs." (*)

MOLINA, Ernesto. Santiago.—Studied in Europe. Annual Exhibitions at Santiago: second-class medal, 1896; first-class medal, 1897; Maturana Prize, 1886; Edwards Prize, *ex-aequo*, 1897, and in 1900.

No. 85—"Confidence." (*)
No. 86—"Interior of Church." (*)

MAGALLANES, M., Manuel.—Santiago (Amateur).

No. 87—"Twilight."

MANRIQUEZ (Señorita). Santiago (Amateur).—Student in the Santiago College.

No. 88—"A poor boy."
No. 89—"Vegetables."

MANDIOLA, Francisco (deceased). Santiago.—Pupil of R. Monvoisin. Expositions at Santiago: first-class medal, 1846; special diploma, 1875.

No. 90—"Portrait of F. Mandiola," by himself. (*)

ORREGO LUCO, Alberto. Santiago, now in Italy.—Annual Exhibition at Santiago: first-class medal in 1891; Edwards Prize, 1891; and prize of honor in 1891.

No. 91—"The great canal of Venice." Moonlight effect. (*)
No. 92—"Marine," sun-setting in Venice. (*)
No. 93—"Afternoon," in Venice.

ORTEGA, José M. Santiago.—Student of the Schools of Fine Arts of Santiago and Paris: second-class medal in Chile and in England.

No. 94—"Before the mirror." (*)

PLAZA, F., Alberto. Santiago (Amateur).

No. 95—"Portrait of General Manuel Búlnes."

PLAZA, F., Marcial. Santiago, now in Paris.—Annual Exhibitions at Santiago: second-class medal, 1897; first-class medal, 1898; Edwards Prize, *ex-aequo*, 1897.

No. 96—"Portrait of Major A. P. F."

PARADA, E. (Señorita). Santiago (Amateur).—Student in the Santiago College.

No. 97—"Vegetables."
No. 98—"Fruits."

RESZKA M., Pedro A. Santiago.—Student in the School of Fine Arts. Annual Exhibitions at Santiago: third-class medal in drawing, 1894, and first-class medal, 1896; third-class medal in painting, 1897, and second-class medal in 1898.

No. 99—"Mistification."

REVECO, Demetrio. Santiago.—Pupil of G. Mochi. Annual Exhibition at Santiago; second-class medal in 1888.

No. 100—"Wild fowls. (*)

RENJIFO, R., Luis. Santiago (Amateur).—Pupil of Pedro Lira. Exposition at Valparaiso: third-class medal, 1896. Annual Exhibition at Santiago: third-class medal, 1898.

No. 101—"Marine at sunset."

SWIMBURN KIRK, Enrique R. Santiago. — Pupil of Onofre Jarpa and G. Mochi. Exposition at Santiago: third-class medal, 1884. Annual Exhibitions at Santiago: second-class medal, 1887; first-class medal, 1888; Edwards Prize, 1889. Exposition at Concepcion, 1887, special prize and gold medal in 1893. Continental Exposition of Buenos Ayres: first-class medal in 1884. Paris Universal Exposition of 1889: Honorable Mention.

No. 102—"Moonrise over the Aconcagua."
No. 103—"Evening glow on the Cordillera."
No. 104—"Springtime at San Juan."
No. 105—"Sunset."
No. 106—Sketches: 1. "Ruins of the first Spanish fort captured by Lord Cochrane at Valdivia in 1820." 2. "Ruins of the Spanish forts of Corral, Valdivia." 3. "Esplanade along the sea-wall, Valparaiso." 4. Chile training-ship 'General M. Baquedano'." 5. "Argentine training-ship 'Presidente Sarmiento,' in Valparaiso harbour." 6. "Valparaiso bay." 7. "Lever & Murphy's ship-yard at Mira-Mar."

"MOONRISE OVER THE ACONCAGUA."
By Enrique R. Swimburn K.

"TRIANA" (SEVILLA).
By Juan Francisco Gonzalez

"THE ACHO ALLEY" (LIMA).
By Juan Francisco Gonzalez

"THE POTATO HARVEST"—By Pedro Jofre.

"SEA-SHORE COAL GATHERERS."
By Senorita Celia Castro.

"PORTRAIT."
By Senorita Magdalena Mira.

"A PORTRAIT."
By Nicanor Gonzalez Mendez.

"INTERIOR IN THE LOUVRE MUSEUM."
By Alfredo Valenzuela Puelma.

SOMMERSKALES, Tomás. Valparaiso, now in England.—Several medals in European Expositions.

No. 107—"A battle," marine. (*)
No. 108—"Landscape."
No. 109—"Landscape in Aconcagua."
No. 110—"An afternoon in Valparaiso," marine.

SUBERCASEAUX, Ramón. Santiago, now in Europe (Amateur).

No. 111—"Cal y Canto Bridge," Santiago. (*)

SMITH, Antonio. Santiago (deceased).—Pupil of Carlo Marko in Italy. Exposition at Santiago: first-class medal in 1875.

No. 112—"The Cachapoal River." (*)

SMITH, Salvador. Santiago (Amateur).

No. 113—"Evening."

SCOFIELD, Luisa (Señorita). Valparaiso.—Annual Exhibition at Santiago: third-class medal in 1890.

No. 114—"Still life." (*)

SMYTHE, Christina N. de (Señora). Santiago.—(Amateur.)

No. 115—"Magnolia."
No. 116—"Lilacs."
No. 117—"Palm trees in Ocoa." Landscape.
No. 118—"Road to the baths of Chillan." Landscape.

SELMER, Fanny (Señorita). Valparaiso.—(Amateur.)

No. 119—"A girl carrying flowers."
No. 120—"Still life."
No. 121—"Portrait."

TOBAR, Daniel. Santiago.—Annual Exhibition at Santiago: second-class medal, 1890.

No. 122—"Las Condes Mountain." (*)

TROUBERT, Desiré C. Valparaiso.—Prizes in Chile and in Europe.

No. 123—"Interior of 'La Merced' Church," Valparaiso.
No. 124—"Marine."
No. 125—"Marine."
No. 126—"Marine."

UNDURRAGA U., Augustin. Santiago.—Annual Exhibitions at Santiago: Honorable Mention in drawing, 1894, and third-class medal in painting, 1897.

No. 127—"Playing top." (*)

VALENZUELA PUELMA, Alfredo. Valparaiso, now in Santiago.—Pupil of G. Mochi and Rafael Collins, of Paris. Exposition at Santiago, 1884, first-class medal; Salon of Paris, 1889, Honorable Mention; Salon of Madrid, 1890: third-class medal; Maturana Prize, 1892; Edwards Prize, 1892 and 1899.

No. 128—"Naiad by the water." (*)
No. 129—"Portrait of Mr. G. Mochi" (artist painter). (*)
No. 130—"Interior in the Louvre Museum." (*)
No. 131—"Portrait of Señorita Emma P."
No. 132—"Portrait of Waldemar Franke."
No. 133—"Chrysanthemums."
No. 134—"Twilight," Capuchinos Plaza, Santiago.

VALENZUELA LLANOS, Alberto. Santiago, now in Paris.—Annual Expositions at Santiago: second-class medal, 1892; first-class medal, 1893; Edwards Prize, 1894, 1897 and 1898; Maturana Prize, 1899.

No. 135—"Piches in bloom." (*)
No. 136—"Spring."

VARGAS, J. de Dios. Santiago.—Prizes in Chile.

No. 137—"Marine." (*)

WALKER, (Señora). Santiago.—(Amateur.) From the Santiago College.

No. 138—"Lake," night scene.
No. 139—"Country house."

ZAÑARTU de B., C. (Señora). Santiago.—(Amateur.)

No. 140—"Landscape."
No. 141—"Fruits."
No. 142—"Lilacs."
No. 143—"Birds."
No. 144—"Ducks," a plate.
No. 145—"Cows."

WATER COLORS.

CASTILLO T. (deceased). Santiago.—(Amateur.)

No. 146—"Marine."
No. 147—"Marine."

HELSBY, Alfredo. Valparaiso.—Pupil of T. Sommerskales and A. Valenzuela Puelma. Annual Exhibitions at Santiago: third-class medal, 1889; second-class medal, 1891; first-class medal, 1900. Exposition at Valparaiso: second-class medal, 1897.

No. 148—"Flowers in Tumbler."
No. 149—"Springtime," old houses in Valparaiso.
No. 150—"Geraniums."
No. 151—"Flowers."
No. 152—"Springtime at the Coast," Valparaiso.

FINE ARTS EXHIBIT.

CHRIST'S DESCENT FROM THE CROSS—Marble, by Virginio Arias.

HERZL, Pedro (deceased). Santiago.—(Amateur.)

No. 153—"Suburbs of Malloa." (*)

GANDARILLAS, Maria Teresa (Señorita). Santiago, now in Paris.—Pupil of Mme. Luminais, Bourguereau, Ferrier and V. Checa.

No. 154—"Thoughtful."
No. 155—"A monk in prayer."
No. 156—"An old Spaniard."

MOLTKE, Carlos von. Santiago.—Expositions at Santiago: first-class medal, 1875, in architecture; prize in 1877 for a projected statue to Andres Bello; first-class medal, 1884, in architecture; Exposition at Valparaiso, only prize, 1884, water colors. Annual Exhibition at Santiago, second-class medal, 1891, in water colors.

No. 157—"Marine," ship-wreck in the Bay of Valparaiso.
No. 158—"Lake of the Incas," Uspallata road.
No. 159—"Marine," a ship abandoned on the high seas.
No. 160—"Landscape," San José de Maipo.

SEARLE, G. (deceased). Valparaiso.—(Amateur.)

No. 161—"View of Valparaiso," 1830.
No. 162—"View of the Bay of Valparaiso," 1830.

WOOD, Jorge (deceased). Santiago.—(Amateur.)

No. 163—"The river wall," view in Santiago, 1828.

PASTEL.

GANDARILLAS, Maria Teresa (Señorita). Santiago, now in Paris.—Pupil of Mme. Luminais, Bourguereau, Ferrier and V. Checa.

No. 164—"A woman's head."

GROUP 137.

CLASS 578.—Sculpture.

ARIAS, Virginio. Santiago.—Pupil of Jouffroy, Falguière and Jean Paul Laurens. Annual Salon of Paris, Honorable Mention in 1882 and 1885; third-class medal, 1887; Paris Universal Exposition, 1889, first-class medal; Exposition in England, second-class medal, 1886; Exposition in Santiago, 1887, first class medal; only prize "Pedro Lira," 1889; Edwards Prize, 1895.

No. 165—"Christ's descent from the Cross." (Plaster of Paris group.)
No. 166—"Gelón." (Plaster of Paris bust.) (*)
No. 167—"Type of Araucana." (Bronze statue.) (*)

BLANCO, José Miguel (deceased). Santiago. Studied in Europe.

No. 168—"A Chile drummer." (Bronze statue.) (*)

BLANCO, Arturo. Santiago.—Student of the School of Fine Arts. Annual Exhibition at Santiago, 1897, third-class medal, and second-class medal in 1898.

No. 169—Plaster of Paris bust, "Señor E. de la Barra."

No. 170—Plaster of Paris bust, "Col. Diego Dublé Almeida."

CONCHA, Ernesto. Santiago.—Student of the School of Fine Arts. Annual Exhibition at Santiago, 1895, second-class medal; 1897, first-class medal; Maturana Prize, 1895 and 1898.

No. 171—"The Miser." (Plaster of Paris statue.) (*)

GONZALEZ, Simón. Santiago, now in Paris.—Pupil of Injalbert and Roubaud. Exhibition of the Society of French Artists, 1893, Honorable Mention; Expostion of Fine Arts in Barcelona, 1898, bronze medal; Paris Universal Exposition, 1900, gold medal.

No. 172—"A fretful boy." (Plaster of Paris statue.)

No. 173—"Spes Unica." (Tombal figure.) High relief in Plaster of Paris.

No. 174—"A beggar." (Plaster of Paris bust.)

No. 175—"Savonarola." (Terra-cotta bust.)

No. 176—"A slave." (Bronze statue.)

No. 177—"The temptation, Eve." (Terra-cotta.)

No. 178—"The pearl," paper-weight. (Terra-cotta.)

No. 179—"A dream," small vase. (Terra-cotta.)

MATTE, Rebeca (Señorita). Santiago, now in Paris.—Pupil of Monteverde, Puech and Ernest Dubois. Salon of Paris, 1900, Honorable Mention; Annual Exhibition at Santiago, 1900, first-class medal.

No. 180—"Militza." (Plaster of Paris statue.)

Sans patrie et sans Dieu la fille de Bohême. Souffre de voir souffrir le malheuraux qu'elle aime.—*Francois Coppee.*—"Pour la Couronne."

No. 181—"L'Enchantresse." (Plaster of Paris statue.)

"Partagée entre la joie et la peur, vers le soir, au bord de la falaise elle croiyait entendre les voix de la mer . . . . c'etait son coeur qui parlait."

THE FRETFUL BOY—Marble, by Simon Gonzalez.

"A BEGGAR"—Plaster of Paris, by Simon Gonzalez.

THE ENCHANTRESS—Marble, by Senorita Rebeca Matte.

PLAZA, Nicanor. Santiago, now in Italy.—Pupil of Jouffroy. Exposition in Santiago, four first-class medals; Exposition in Philadelphia, third-class medal, 1876; Annual Exhibition at Santiago, Prize of Honor, 1897; Edwards Prize, 1888, and Prize of Honor in 1889.

No. 182—"Caupolican." (Bronze statue.) (*)

No. 183—"Playing Chueca." (Bronze statue.) (*)

TAPIA, Lucas. Santiago.—Student of the School of Fine Arts. Annual Exhibitions at Santiago, 1895, second-class medal; 1897, first-class medal; Maturana Prize, 1897, *ex-aequo*; Edwards Prize in 1898.

No. 184—"Fresia." (Plaster of Paris statue.) (*)

COMMISSION OF CHILE. Santiago.

Photographs taken from statues which belong to the Museum of Fine Arts of Santiago.

In Marble:

No. 185—"Christ's descent from the Cross." (See No. 165.) By V. Arias.

No. 186—"Daphne and Chloe." By V. Arias.

No. 187—"Youth." By V. Arias.

No. 188—"Father Las Casas." By José M. Blanco.

No. 189—"The fretful boy." (See No. 172.) By Simón Gonzalez.

No. 190—"Giotto." By Carlos Lagarrigue.

No. 191—"Goddess of War." By Carlos Lagarrigue.

No. 192—"Militza." (See No. 180.) By Señorita Rebeca Matte.

No. 193—"Chimera." By N. Plaza.

In Plaster of Paris:

No. 194—"A laurel leaf." By V. Arias.

No. 195—"Pormas." Araucanian Chief of Cañete. By José M. Blanco.

No. 196—"Angaten." Araucanian Chief of Podaví. By José M Blanco.

No. 197—"The kiss." By José M. Blanco.

No. 198—"Lautaro." By José M Blanco.

No. 199—"Regrets of Cain." By Simón Gonzalez.

No. 200—"A nude study." By Simón Gonzalez.

Photograph from an Oil Painting of the same Museum:

No. 201—"First Chile Congress." Which met on July 4th, 1811. By N. Gonzalez Mendez.

GROUP 138.

CLASS 579.—Drawings.

HILLMAN, Blanca (Señorita). Santiago.—(Amateur.)

No. 202—" Dog's head." (Crayon.)

RESZKA M., Pedro A. Santiago.—Pupil of the School of Fine Arts. Annual Exhibition at Santiago: drawing, third-class medal, 1894; first-class medal, 1896; and in painting, third-class medal in 1897, and second-class medal in 1898.

No. 203—" Sketch." (Charcoal.)

No. 204—" Portrait of Señor M. M. M. (Crayon.)

OLIVEIRA, Luz R. (Señorita). Pupil of the Santiago College.

No. 205—" Etching on silk."

GROUP 139.

CLASS 580.—Architecture.

CRUZ MONTT, Alberto. Santiago, now in Paris.

No. 207—" Project for a Monument."

No. 208—" Project for a Monument." Details of the same monument.

THE CHIMERA—Marble, by Nicanor Plaza.

CAUPOLICAN—Bronze Statue, by Nicanor Plaza.

LIST OF PRIZES.

Preliminary Statement of Awards Made to Exhibitors at the Pan-American Exposition.

CHILE PRIZES.

INSTALLATION OF EXHIBITS.

JURORS: William Anderson Coffin, chairman; Barclay B. Chadwick, Enrique Budge, W. de C. Ravenel, Chas. Richard Dodge.

Hors Concours: Commission of Chile: Enrique Budge (President of the Commission), member of this Special and of the Superior Juries.

DIVISION I.—AGRICULTURE.

JURORS: S. M. Babcock, chairman; Edgar Brown, F. E. Dawley, Chas. Richards Dodge, M. L. Floyd, José F. Godoy, Carlos Iturraspe, Fred L. McMullen, Ramon Piña, Modesto Quiroga, F. Lamson Scribner, H. W. Spangler, Frank D. Spring.

Gold Medals: Commission of Chile, Santiago—nitrates and guanos.
Commission of Chile, Santiago—flax and cotton.
Commission of Chile, Santiago—collective exhibits of cereals and seeds.
Charme, Eduardo, Santiago—flax.
Committee of Manure Propaganda, Santiago—collection of manures.
Jerman, 2°, Westermeir, Osorno—wax.

Silver Medals: Escuela Agrícola de Chillan, Chillan—wax.
Bunster, Manuel A., Angol—wax.
Commission of Chile, Santiago—flax and cotton.
Committee of Manure Propaganda, Santiago—cereals.
Sociedad Nacional de Agricultura, Santiago—collection of agricultural bulletins.
Quinta Normal de Agricultura, Santiago—collection of cereals.

Bronze Medals: Escuela de Agricola de Concepcion—collection of cereals and seeds.
Calderon, Eulojio, Tongoi—cotton.
Commission of Chile, Santiago—agricultural map.

Bronze Medals: Commission of Chile, Santiago—alfalfa hay and grass seeds.
Quinta Normal de Agricultura, Santiago—collection of books.
Ruiz, F. Sanchez, Curimon—tobacco.

Honorable Mention: Alvarez, P., Vallenar—barley.
Avila, I., Santiago—corn, millet and beans.
Alvarez, P., Vallenar—wheat.
Barrientos, A., Osorno—German knot grass.
Buzeta, Luis, Santiago—wheat, corn and beans.
Charme, Eduardo, Santiago—tobacco.
Charme, Eduardo, Santiago—flax seed.
Commission of Chile, Santiago—potatoes.
Commission of Chile, Santiago—agricultural publications.
Committee of Manure Propaganda, Santiago—grass seeds.
Correa, A., Aconcagua—wheat.
Correa, A., Aconcagua—barley.
Caballero, E., San Felipe—wheat, barley, flax seed and lentils.
Caballero, E., San Felipe—yellow clover seed.
Devoto, Luis, Rancagua—wheat.
Escuela Agrícola de Ancud, Ancud—potatoes.
Gandarillas, Alberto, Vallenar—alfalfa in bales.
Gamboa, B., Pelequen—canary seed and beans.
Lavergne, Gaston, Santiago—publications about plant diseases.
Martel, M., San Felipe—flax seed.
Mackenthum, Neves & Cia., Los Andes—alfalfa hay in bales.
Ortuzar de Valdes, Ana, Cunaco—tobacco.
Ortuzar de Valdes, Ana, Cunaco—wheat and Spanish beans.
Ortuzar de Valdes, Ana, Cunaco—red clover seed.
Cuevas de Ortuzar, Irene, Colchagua—wheat and beans.
Puga Borne, F., Chillan—tobacco.
Pizarro & Piraino, Los Andes—alfalfa hay in bales.
Pinto, M. A., Elqui—wheat, peas and beans.
Prida, Francisco de la, Pelequen—barley.
Quinta Normal de Agricultura, Santiago—potatoes.
Quinta Normal de Agricultura, Santiago—white trefoil and trebillo.
Rojas Magallanes, V., Ovalle—corn, castor-oil seed, beans, peas and barley.
Ross, de Edwards, Juana, Valparaiso—wheat and barley.
Salas U., Eduardo, Valparaiso—wheat and beans.
Subercaseaux de Concha, E., Santiago—barley.
Sanchez, Ramiro, Santiago—barley.
Schulze, Emilio, Valparaiso—vegetable hair.
Valenzuela, Juan de Dios y Moises, Caupolican—wheat.
Irribarren, E., Elqui—lentils.
Valdivieso, Ramon, Talca—wheat.
Valdes, Elias—wheat and seeds.
Valenzuela, Ciriaco, Rancagua—beans.
Valdes Valdes, Ismael, Cunaco—white and red clover seed.
Sauvaget, Victor y Calderon E., La Serena, castor-oil seeds.
Zanzi & Cia., La Serena—castor-oil seeds.

DIVISION II.—AGRICULTURAL IMPLEMENTS.

JURORS: J. H. Brigham, chairman; John O. Adsit, Teodoro Schneider, H. W. Spangler.

Gold Medal: Commission of Chile—cultivators.

Silver Medals: Committee of Manure Propaganda, Santiago—water for irrigating purposes.
Peña, Jose del Carmen, Santiago—pumps.

Bronze Medal: Hurtado, Carlos, Valparaiso—woven wire fencing.

DIVISION IV.—FOODS AND THEIR ACCESSORIES.

JURORS: A. L. Smith, chairman; Enrique Budge, F. W. Clarke, Antonio Galarce, George E. Laverack, John H. Long, Frank H. Peabody, A. Serafini, Lauro Viadas.

Gold Medals: Alexander, P. S., Santiago—liquors.
Commission of Chile, Santiago—beers.
Anwandter, Hos. & Cia., Valdivia—beers.
Giosia, Hos. & Cia., Luis, Santiago—chocolates and cocoas.
McKay, Alexander, Talca—biscuits.
Compañia de Refineria de Azucar de Viña del Mar, Viña del Mar—refined sugar.
Rossard, Hector, Santiago—liquors.
Cousiño, Carlos, Santiago—beers.
Bascuñan, Ascanio, Ocoa—palm tree honey.

Silver Medals: Escuela Agrícola de Chillan, Chillan—hops.
Escuela Agrícola de Chillan, Chillan—honey.
Escuela Agrícola de Concepcion, Concepcion—honey.
Escuela Agrícola de Ancud, Ancud—honey.
Bunster, Manuel A., Angol—honey.
Commission of Chile, Santiago—anise-seed and red pepper.
Gleisner, M., Santiago—beet sugar.
Ventura, Hos., Santiago—liquors.
Leliva, Luis, San Fernando—spirits.
Silva Lastarria, A., Santiago—vermicelli.
Neckelmann, Hos, Valparaiso—dried peaches and raisins.
Ortuzar de Valdes, Ana, Cunaco—spirits.
Peralta, Felix A., Elqui—dried peaches and raisins.
Paulsen, Ebbe, Parral—mineral waters.
Compañia de Refineria de Azucar de Viña del Mar, Viña del Mar—spirits.
Rubio, Nicolas, Rancagua—canned corn and vegetables.
Schmidt & Cia., Carlos, Osorno—spirits.
Schaffner, Guillermo, Serena—mineral waters.
Velasco, Benjamin, Santiago—flour.
Commission of Chile, Santiago—quina wines and kola.
Rembadi, F., Valparaiso—quina wines.

Bronze Medals: Barrientos, M., Osorno—apple cider.
Barrientos, A., Osorno—apple cider.
Commission of Chile, Santiago—palm-tree syrup.

Bronze Medals: Commission of Chile, Santiago—palm-tree syrup.
Commission of Chile, Santiago—preserved fruits.
Cotapos, E. P., Santiago—flour.
Frugone, Pedro, Valparaiso—aerated waters.
Fonck & Cia., Carlos, Valparaiso—preserved fish and shellfish.
Fábrica de Azucar del Membrillo, Parral—beet syrup and molasses.
Griffiths & Co., Valparaiso—aerated waters.
Gray & Sinclair, Quilpue—canned fruits and marmalades.
Hein, J., Osorno—apple cider.
Quinta Normal de Agricultura, Santiago—honey.
Rovegno, Antonio, Santiago—vermicelli.
Compañia de Refineria de Azucar, Viña del Mar—cane syrup and molasses.
Stork, José, Valdivia—liquors.
Dauelsberg, Juan, Santiago—flour and middlings.
Zanzi & Cia., Serena—olive oil.
Mujica, Francisco F., Santiago—palm-tree syrup.
Peralta, Juan de D., Serena—quina wine.

Honorable Mention: Commission of Chile, Santiago—dried cherries and grapes.
Commission of Chile, Santiago—boiled wheat, flour of roasted wheat and beans.
Commission of Chile, Santiago—sun-dried meat.
Committee of Manure Propaganda, Santiago—dried cherries.
Coke, Federico, Rancagua—flour.
Ducó, A., San Felipe—starch.
Garcia, Augustin A., Calbuco—preserved game.
Frugone, Pedro, Valparaiso—liquors.
Klein, Luis & Emilio, Santiago—infant food.
Lanz, E., Buin—anise-seed.
Mackenthum, Neves & Co., Los Andes—preserved fruits and vegetables.
Roncati y Montefusco, Concepcion—macaroni.
Ortiz & Cia., Miguel A., Calbuco—preserved fish and shellfish.
Renjifo, Matilde, Santiago—beverages made from almonds.
Wiker & Pagueguy, Chillan—mineral waters (potash and sulphur).

DIVISION V.—WINES AND BRANDIES.

JURORS: Enrique Budge, chairman; F. W. Clarke, Emile Dubois, Jesus M. Nuncio, Geo. C. Schon.

Gold Medals: Brown, Guillermo, San Felipe—wines.
Commission of Chile, Santiago—general display (groups 46 and 47).
Correa, A. J. Gregorio, Lontue—wines.
Donoso, Mateo, Talca—wines.
Dreysse, A. & Cia, Santiago—rectifier.
Eastman, Adolfo, Limache—wines.
Fernandez Concha, Domingo, Santiago—wines.
Hernandez, Luis, Elqui—brandy.

Gold Medals: Quinta Normal de Agricultura, Santiago—publications.
Quinta Normal de Agricultura, Santiago—wines.
Quinta Normal de Agricultura, Santiago—brandy.
Rojas, Manuel, Santiago—publications.
Strickler & Kupfer, Hos, Santiago—wine pumps.
Vial, Leonidas, Santiago—wines.

Silver Medals: Bertrand & Cia, Santiago—wines.
Cruz, Jose V. R., Santiago—brandy.
Cousiño, Arturo, Santiago—wines.
Commission of Chile, Santiago—wine pumps and vintage machines.
Delano, Eduardo, Santiago—wines.
Errazuriz, Rafael, Panquehue—wines.
Fernandez, E. Cotidio, Santiago—wines.
Larrain, Ladislao, Santiago—wines.
Lavergne, Gaston, Santiago—publications.
Mandiola, Telesforo, Santiago—wines.
Meneses, Napoleon, Los Andes—brandy.
Ochagavia, Silvestre, Santiago—wines.
Peralta, Juan de D., Elqui—brandy.
Subercaseaux de Concha, Emiliana, Santiago—wines.
Subercaseaux, Ramon, Santiago—wines.
Tocornal, Jose, Santiago—wines.
Torres, Jose Dolores, Serena—wines.
Undurraga, Francisco, Santiago—wines.
Velasco, Vicente, Limache—wines.
Vergara Correa, Bonifacio, Talca—wines.
Videla, Alfredo, Ovalle—wines.
Valdes, Ana Ortuzar de, Cunaco—brandy.

Bronze Medals: Alba, Olegario, Elqui—brandy.
Aracena, Navarro & Cia., Elqui—brandy.
Aravena, Jeronimo, Santiago—casks.
Commission of Chile, Santiago—wine (sparkling).
Cerda y Talavera, Lontué—wines.
Echenique, J. Miguel, Santiago—wines.
Galeno, Salvador, Serena—brandy.
Miranda, Rios & Cia., Vallenar—wines.
Marambio, Nicolas, Santiago—wines.
Martinez, Lisandro, Bulnes—wine.
Nebel, Alejandro, Huasco Bajo—wines.
Naranjo, Joaquin, Vallenar—brandy.
Rogers y Zerrano, Tome—wines.

Honorable Mention: Fergie, George, Vallenar—wines.
Naranjo, Joaquin, Vallenar—wines.
Nebel, Alejandro, Huasco Bajo—brandy.
Palma e Hijos, Tome—wines.
Peralta, Felix A., Elqui—brandy.

DIVISION VI.—FORESTRY.

JURORS: B. F. Fernow, chairman; H. S. Reed, Rosendo Sandoval, George P. Sawyer, Teodoro Schneider.

Gold Medal: Commission of Chile, Santiago—collection of woods.

Silver Medal: Hermann, Julian, Concepcion—prepared woods.

Bronze Medals: Bascuñan, Ascanio, Ocoa—palm fiber paper.
Cruz, F. E., Vallenar—algarrobilla.
Committee of Manure Propaganda, Santiago—wood collection.

Honorable Mention: Barrios, Hermanos, Angol—collection of woods.
Hacienda de Niblinto, Chillan—collection of woods.
Escuela Practica de Agricultura de Ancud, Ancud—collection of woods.
Escuela Practica de Agricultura de Chillan, Chillan—prepared woods.

DIVISION VII.—FISH AND FISHERIES.

JURORS: Chas. H. Babcock, chairman; A. Nelson Cheney, H. F. Moore, I. H. Dunlap.

Gold Medals: Fonck & Cia., Carlos, Valparaiso—tinned lobsters.
Wolnitzky, Baldomero, Santiago—notes on fishing in Chile.
Commission of Chile, Santiago—two pamphlets on fishing.

Silver Medals: Commission of Chile, Santiago—appliances for sea fishing.
Commission of Chile, Santiago—collection of stuffed fishes, and fishes in alcohol.
Commission of Chile, Santiago—aquatic birds.

Bronze Medals: Commission of Chile, Santiago—aquatic invertebrates.
Commission of Chile, Santiago—aquatic invertebrates in alcohol.
Commission of Chile, Santiago—photographs of aquatic invertebrates.
Commission of Chile, Santiago—photographs of fishes.
Garcia, Agustin A., Calbuco—tinned fishes and mollusks.
Ortiz, Miguel A., Calbuco—tinned mollusks.

Honorable Mention: Commission of Chile, Santiago—two kinds of marine plants.
Commission of Chile, Santiago—specimens of skins and skeletons of four aquatic mammalia.
Commission of Chile, Santiago—models of fishing boats.

DIVISION VIII.—MINES AND METALLURGY.

JURORS: John Brinkinbine, chairman; Juan D. Fleury, J. A. Holmes, Jefferson Middleton, Heinrich Ries, Guillermo Yunge.

Gold Medals: Commission of Chile, Santiago—collective exhibit of the mineral resources of the country.
Delegacion Fiscal de Salitreras y Asociacion Salitrera de Propaganda, Santiago—exhibit of photographs, charts, models and specimens illustrative of the nitrate industry of Chile.

Silver Medals: Arauco Co., Ltd., The, Coronel—coal and coal briquettes.
Copiapó Mining Co., The, Copiapó—exhibits of photographs and plans of copper mines.
Compañia Explotadora de Lota y Coronel, Lota—earthenware.
Compañia Explotadora de Lota y Coronel, Lota—coal, fire clay and copper.
Latrille, Francisco, Antofagasta—ores and geological specimens.
Maestranza del F. C. de Copiapó, Caldera—parts of mining machinery.
Sociedad Chilena de Fundicion, Valparaiso—photographs and plans of copper mines.

Bronze Medals: Cousiño, Carlos, Santiago—Portland cement.
Compañia Industrial de Atacama, Copiapó—copper ores and products.
Cunningham, Tomas, Coquimbo—building stone.
Fuenzalida, Carlos, La Serena—fuel briquette.
Geiger & Maurer, Calera—Portland cement.
Harnecker, Otto, Ligua—copper ores and products.
Laso, J. Tadeo, Santiago—series of samples showing the sea sands of the entire coast of Chile.
Mina "Elisa de Bordos," Copiapó—silver ores and plan of mine.
Morandé, Salvador, Santiago—manufactured stones and bricks.
Lambert, Sucesion, Serena—copper ores and products.
Piedra & Cia., Caldera—copper ores.
Roca & Cruz, Santiago—manufactured stones and bricks.
Mery, Santiago, Serena—lapis lazulis.
Urrutia y Odde e hijo, Santiago—marbles.
Villarroel, Arturo, Santiago—limestone.

Honorable Mention: Compañia Minera "La Serena," Serena—copper ores.
Central Chile Copper Co., Panulcillo—copper ores and regulus.
Commission of Chile, Santiago—earthenware from Chillan.
Elguin, Señores, Santiago—copper ores.
Escudero, Ramon, Iquique—salts of soda and potash.
Godoi, Samuel, Huasco—iron ores.
Gonzalez, Jose Bruno, Santiago—cobalt and copper ores.
Godoi, Samuel, Huasco—gypsum.
Hernandez & Cia., Lino, Serena—copper, silver and gold ores.
Jara, Pedro A., Santiago—manganese ore.
Klemm, Jose, Lumaco—earthenware.
Moreno, Honorio y Alarcon A., Taltal—copper ores.
Puelma Tupper, Francisco, Santiago—kielselguhr (abrasive).
Ramirez, Ramon, y Oyarzo Camilo, Iquique—kaolin.
Rodŕiguez, Enrique, Serena—cobalt ore.
Sociedad "Challacollo," Iquique—silver ores and sulphides.
Tupper, Felipe, Santiago—copper and silver ores and photographs and plans of copper mines.
Vergara, Luis A., Santiago—coal samples.
Videla Hidalgo, Serena—copper ores.
Videla, Alfredo, Serena—superferrous water and precipitated copper.
Villarroel, Arturo, Santiago—kaolin.

DIVISION IX.—MACHINERY.

JURORS: Ira N. Hollis, chairman; Luis de Arozarena, William L. Aughinbaugh, R. C. Carpenter, Mortimer E. Cooley, E. G. Fischer, Chas. T. Higginbotham, Enrique Lanz, Cecil H. Peabody, Perry Benjamin Pierce, H. W. Spangler, Frederick A. Tennant.

Gold Medal: Escuela de Artes y Oficios, Santiago—shafts, bearings, pulleys and cog-wheels.

Silver Medal: Parque y Maestranza del Ejercito, Santiago—turning lathes.

Honorable Mention: Ferro-Carril de Copiapo, Caldera—shafts, bearings, pulleys and cog-wheels.
Plump, Jerman, San Felipe—leather belting.
Strickler & Kupfer, Hos., Santiago—shafts, bearings and friction clutch.

DIVISION X.—ELECTRICITY.

JURORS: Carl Hering, chairman; Arthur V. Abbott, Henry S. Carhart, William S. Franklin, Winder Elwell Goldsborough, Dugold C. Jackson, A. E. Kennedy, William L. Puffer.

Gold Medal: Taller Telegráfico de les Ferro-Carriles del Estado, Santiago—telegraph, telephone and electric light appliances.

DIVISION XI.—TRANSPORTATION.

JURORS: H. G. Prout, chairman; Arthur V. Abbott, William L. Aughinbaugh, Albert C. Bostwick, R. C. Carpenter, J. M. Carson, Jr., Frederic A. Delano, David Porter Heap, C. H. McLellan, Henry M. Paul, Cecil H. Peabody, George D. Shepardson, Ambrose Swasey, J. Elfreth Watkins.

Silver Medals: Ferro-Carril de Copiapó, Copiapó—locomotives.
Intendencia Jeneral del Ejército, Santiago—harness and saddles.
Maestranza del Ferro-Carril de Copiapó, Caldera—locomotive cylinders.
Parque y Maestranza del Ejército, Santiago—harness and saddles.

Bronze Medals: Bardeau, Hermanos, Santiago—pleasure vehicles (carriages).
Copetta, Hermanos, Santiago—bicycles.
Commission of Chile, Santiago—road carts.
Commission of Chile, Santiago—wheels and wheel parts.
Commission of Chile, Santiago—harness and saddles.
Coudeu, Camalez Hermanos, Santiago—harness and saddles.
Ferro-Carriles del Estado, Santiago—bogie truck for passenger car.
Ferro-Carriles del Estado, Santiago—locomotive cylinder.
Tisné, B., Santiago—bicycle and frame.
Thieme & Liebe, Santiago—pleasure vehicles (carriages).

Honorable Mention: Herman, Julian, Concepcion—wheels and wheel parts.
Douzet, Eugenio, Santiago—wheels and wheel parts.

DIVISION XII.—ORDNANCE AND MUNITIONS OF WAR.

JURORS: George Eugene Belknap, chairman; Philip R. Alger, Peter C. Harris, Victor Hernandez, Richmond Pearson Hobson, C. F. Shoemaker, Thom. Williamson, John P. Wisser.

Gold Medal: Parque y Maestranza del Ejército, Santiago—collective exhibit of army equipment.

Honorable Mention: Commission of Chile, Santiago—naval literature of Chile.
Commission of Chile, Santiago—bound volumes of professional publications.
Hydrographic Office, Valparaiso—atlas of charts and geographical and hydrographical publications.
Jones & Cia., H. H., San Bernardo—powder.
Naval Circle, Valparaiso—bound volumes of the "Revista de Marina."
Styles & Cia., Santiago—ambulance car.

DIVISION XIII.—MANUFACTURES.

JURORS: Edmund A. Engler, chairman; William L. Aughinbaugh, Marcus Benjamin, Morris Benson, A. H. Bottum, J. M. Carson, Jr., John L. Choyer, F. W. Clarke, George Coit, Stanley T. Cozzens, John G. Eppendorff, Alberto Falcon, M. L. Floyd, David Porter Heap, W. H. Holmes, John R. Kendrick, Enrique Lanz, F. P. Machado, Edward S. More, Henry M. Paul, Frank H. Peabody, G. G. Pond, W. de C. Ravenel, John K. Rees, Edward Robinson, Jose A. Saenz, Carlos Sellerier, George D. Shepardson, John Strootman, Ambrose Swansey, Evaldo Tirado, Juan P. Tomas, Chas. H. Turner, Harry Walbridge, Mrs. Lester Wheeler, Miss Eugenie Hauenstein.

Gold Medals: Laboratorio "Chile," Santiago—drugs.
Reich, Federico, Santiago—ropes and twines.
Strappa & Cia., Valparaiso—furniture.

Silver Medals: Amador, Guajardo, Iquique—drugs.
Cauquelin, E., Valparaiso—perfumery and pomades.
Caballero, Emiliano, Graneros—ropes and twine.
Fábrica de Paños de Bella Vista, Tome—wool cloths.
Häberle, Hermanos, Santiago—drugs.
Hrömada & Cia., Valparaiso—cork goods.
Rudloff & Hijos, Valdivia—tanned leather.
Perez, Marcos F. X., La Serena—drugs.
Parry & Cia., San Felipe—ropes and twine.
Sociedad de Tejidos, Santiago—woolen cloths and blankets.
Schrebler, Frederico, Santiago—leather ornaments.
Schrebler, Frederico, Santiago—leather sculpture work.
Styles & Cia., Taller "El Condor," Santiago—vaults and safes, and safety locks.
Commission of Chile, Santiago—furniture.

Bronze Medals: Batmale & Co., Santiago—trunks and bags.
Bravo, Gregorio, Santiago—shoe blacking.
Barrientos, E., Santiago—drugs.
Compañia Explodatora de Lota y Coronel, Lota—statuary and ornamental articles.
Compañia Galvanizadora de Fierro, Valparaiso—galvanized iron.
Commission of Chile, Santiago—furniture.
Commission of Chile, Santiago—soaps and pomades.
Campo, Francisco del, Santiago—drugs.
Gutierrez, David, Santiago—automatic register.
Estado Mayor del Ejercito, Santiago—horseshoes.
Gallot, Alberto, Santiago—picture frames.
Hórmann & Cia., Valparaiso—candles.
Häberle, Hermanos, Santiago—perfumery and extracts.
Intendencia General del Ejercito, Santiago—tents.
Kunstmann, J. & C., Valdivia—sole leather.
Debuysère, Carlos, Santiago—finger exercising machine.
Laboratorio "El Escudo de Chile," Santiago—drugs.
Laboratorio "El Escudo de Chile," Santiago—perfumery and extracts.
Petri, Alejandro, Valparaiso—shoes.
Perez, Jose Jesus, Santiago—parquet flooring.
Picardo & Cia., E., Santiago—writing inks.
Rodriguez, J. Antonio, Valparaiso—cigars and cigarettes.
Rudloff & Hijos, Valdivia—sole leather.
Roca & Cruz, Santiago—bricks and tiles.
Tello, Aureliano, Santiago—shoe polish.

Honorable Mention: Artolózaga, Gavino, Santiago—shoes.
Avaria, Romulo, Talca—bottle protector.
Bañados & Cia., J., Santiago—corsets.
Puga Borne, Federico, Santiago—furs.
Bravo, Gregorio, Santiago—writing inks.
Compañia Sud-Americana de Tabacos, Valparaiso—cigars and cigarettes.
Cousiño & Lyon, Valparaiso—composition candles.
Cruz, Montt & Cia., Santiago—powdered quillay extract.
Commission of Chile, Santiago—shoes.
Commission of Chile, Santiago—furs.
Commission of Chile, Santiago—leather clothing.
Commission of Chile, Santiago—feather dusters.
Commission of Chile, Santiago—woolen mantles.
Commission of Chile, Santiago—laces (Chillan).
Commission of Chile, Santiago—gas lamps and brackets.
Commission of Chile, Santiago—baskets of vegetable fibres.
Commission of Chile, Santiago—brooms.
Elzo & Cia., Santiago—quillay extract.
Fontecilla, Mariano, Santiago—extract of quillay.
Haebig, Otto, Santiago—bricks and tiles.
Laso, J. Tadeo, Santiago—plans for crematory furnaces.
Moder & Hijos, Antonio, Santiago—furniture.
Moder & Hijos, Santiago—frames and mouldings.
Morandé, Salvador, Santiago—bricks and tiles.

Honorable Mention: Opazo & Cia., Santiago—candles.
Picardo & Cia., Santiago—feather dusters.
Rivera, G., Chillan—furniture.
Silva, Alejandro, Santiago—silk and silk fabrics.
Styles & Cia., "Taller del Condor," Santiago—operating table.
Tello, Aureliano, Santiago—shoe polish.
Termas de Chillan, Chillan—baskets of vegetable fibres.
Vaccaro, Andres, Talca—brooms.

DIVISION XIV.—GRAPHIC ARTS.

JURORS: Theodore Low DeVinne, chairman; Marcus Benjamin, Julio Perez Canto, Stephen J. Kubel, D. B. Wainwright.

Silver Medals: Commission of Chile, Santiago—half-tone work.
Gillet, Hermanos, Valparaiso—lithography.
Imprenta Cervantes, Santiago—typography.

Bronze Medals: Encuadernacion Barcelona, Santiago—bookbinding.
Gillet, Hermanos, Valparaiso—photo-engraving.
Imprenta Barcelona, Santiago—blank books.
Imprenta Barcelona, Santiago—typography.

Honorable Mention: Cadot & Cia., P., Santiago—lithography.
Encuadernacion Europea, Santiago—binding.
Gillet, Hermanos, Valparaiso—typography.
Imprenta Gutenberg, Santiago—typography.
Imprenta de La Patria, Valparaiso—typography.
Imprenta Barcelona, Santiago—photo-engraving.
Imprenta Sud-Americana, Valparaiso—publication.
Imprenta Elzeviriana, Santiago—typography.
Lathrop, Federico T., Valparaiso—typography.
Schrebler, Federico, Santiago—binding.

DIVISION XV.—LIBERAL ARTS.

JURORS: Carroll D. Wright, chairman; William F. Apthorp, J. C. Boykin, Carlos Silva Cruz, S. H. Griffith, Richard Harcourt, Jose I. Tollalbas, Antonio M. Maya, Edward L. Munson, Thomas W. Smillie, William Rogers Terrett, O. H. Tittman, Chas. H. Verrill, Arthur Whiting, John P. Wisser, S. H. Woodbridge, J. R. Zubiaur.

Gold Medals: Commission of Chile, Santiago—statistics of public instruction and notes of mining, industrial establishments, etc.
Commission of Chile, Santiago—guitars.
Commission of Chile, Santiago—geographical and statistical maps.
Commission of Chile, Santiago—pedagogy books.

Gold Medals: Commission of Chile, Santiago—general literature and official books.
Cormatches, Alberto, Santiago—guitars, mandolins and lutes.
Guzman, E., Santiago—photographs.
Junta de Beneficiencia, Santiago—hospitals for the insane.

Silver Medals: Commission of Chile, Santiago—map of Chile for primary schools.
Escuela de Artes y Oficios, Santiago—school work.
Estado Mayor General del Ejercito, Santiago—six atlas photographical works.
Institucion Leon XIII., Santiago—photographs and plans of cheap houses for workmen.
Oficina Central de Estadistica, Santiago—statistical diagrams.
Oficina Hidrografica, Valparaiso—naval literature and atlas of naval charts.
Oficina Hidrografica, Valparaiso—collection of hydrographic charts.
Oswald, Carlos, Valparaiso—photographic works.
Lira, A., Santiago—photographic works.
Roediger, Otto, Santiago—orthopedic apparatus.
Zanzani, Juan, Santiago—"Esmeralda" (opera in four acts).

Bronze Medals: Arsenales de Marina, Valparaiso—aiming apparatus.
Besoain, Jose Miguel, Santiago—collection of Chile postal stamps.
Escuela Profesional de Niñas, Santiago—school work.
Oficina Hidrografica, Valparaiso—photographic works.

Honorable Mention: Adaro, E., Santiago—photographs.
Alessandri, José Pedro, Santiago—maps of farms.
Cormatches, Alberto, Santiago—strings.
Commission of Chile, Santiago—photographic works.
Delegacion Fiscal de Salitreras, Iquique—maps.
Escuela Profesional de Niñas, Valparaiso—school work.
Oficina Hidrográfica, Valparaiso—photographs of the navy of Chile.
Ovalle, Davila A., Santiago—photographic works.
Ramos, M., Santiago—method for bandore.
Rios, Dr. Conrado, Santiago—scientific study on military shoes, with models.
Sociedad de Fomento Fabril, Santiago—school work.
Valck, F., Valdivia—photographic works.
Zorzi, Carlos, Santiago—method for bandore.

DIVISION XVI.—ETHNOLOGY AND ARCHÆOLOGY.

JURORS: Edward S. Morse, chairman; Enrique H. Garibay, W. H. Holmes, Jose I. Torralbas, Otis T. Mason.

Bronze Medal: National Museum of Natural Sciences, Santiago—ethnological and archæological relics from Chile.

DIVISION XVII.—FINE ARTS.

Special Diploma and Medal of Honor Above and Apart from all Other Awards.

JURORS: J. Carroll Beckwith, chairman; Herbert Adams, Edwin H. Blashfield, Kenyon Cox, Daniel C. French, Cass Gilbert, Samuel Isham, Henry Rutgers Marshall, A. Phimister Proctor, G. A. Reid, William R. Ware, Henry Wolf. Augustus St. Gaudens, Windsor, Vt., for exhibit of sculpture.

Gold Medal: Arias, Virginio, Santiago—sculpture.

Silver Medals: Correa, Rafael M., Santiago—oil paintings.
Gonzalez, Simon, Paris, France—sculpture.
Harris, Juan E., Paris, France—oil paintings.
Lira, Pedro, Santiago—oil paintings.
Reszka, Pedro M., Santiago—oil painting and charcoal drawings.

Bronze Medals: Jarpa, Onofre, Santiago—oil painting.
Matte, Señorita Rebeca, Santiago—sculpture.
Orrego Luco, Alberto, Santiago—oil painting.
Plaza, Nicanor, Santiago—sculpture.
Valenzuela Puelma, Alfredo, Valparaiso—oil painting.

Honorable Mention: Concha, Ernesto, Santiago—sculpture.
Gonzalez Mendez, Nicanor, Santiago—oil paintings.
Valenzuela Llanos, Alberto, Santiago—oil painting.

Grand Total.

COUNTRY.	Gold.	Silver.	Bronze.	Honorable Mention.	Total Recompense.
United States	601	663	562	470	2,296
Argentina	19	21	25	22	97
Bolivia	4	3	7	15	29
Canada	13	23	17	34	87
Chile	51	98	110	160	419
Costa Rica	8	9	12	24	53
Cuba	38	55	57	82	232
Dominican Republic	3	6	4	21	34
Ecuador	22	39	55	69	185
El Salvador	5	7	3	15	30
French Colonies	3	11	13	5	32
Guatemala	1	2	2	8	13
Honduras	11	9	11	17	48
Jamaica	5	5	7	8	25
Mexico	78	151	130	232	600
Nicaragua	7	22	44	91	164
Peru	4	20	31	35	90
Porto Rico	11	14	45	75	145
Hayti	2	. .	1	1	4
Brazil	1	1	2	. .	4
Totals	887	1,159	1,147	1,381	4,577

The awards in certain groups of the divisions, wherein the exhibit has not yet been completed or reported upon, in Agriculture, Horticulture and Live Stock, will be published in a separate list.

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